

Formosa Plastics Corporation, Texas 201 Formosa Drive • P.O. Box 700

Point Comfort, TX 77978 Telephone: 361-987-7000

January 30, 2019

Certified Mail: 7018 0360 0000 5327 9320 Air Section Manager, Region 14 Texas Commission Environmental Quality 6300 Ocean Drive, Suite 1200 Corpus Christi, Texas 78412

RE: Formosa Plastics Corporation, Texas

TCEQ Air Quality Account No. CB-0038-Q Fourth Quarter 2018 SUMMA Canister Report

## Dear Air Section Manager:

Per your request, we have enclosed a quarterly summary of results from the Point Comfort SUMMA Canister Monitoring System. The fourth quarter of 2018 results are shown for each site on the attached tables. Additionally, we have included wind roses generated by the weather sensor on the FTIR or wind direction data from other air monitoring devices for each SUMMA canister sampling date during the fourth quarter of 2018.

Beginning with the first sample date in the fourth quarter 2003, we have also included average wind speed and wind direction on the tables. This was done at the request of Mr. David Carmichael of the TCEQ Austin office. In addition, at the request of Mr. Carmichael, the following changes have been made to the tables:

The duplicate sample data for all compounds has been removed from the VOC Canister Analysis Tables;

The averaged duplicate sample data was replaced with only the routine sample data in the VOC Canister Analysis Tables; and

An additional VOC Canister Analysis Table was created for the duplicate samples data. This was done so that the relative percent difference (RPD) could be calculated. The calculation for obtaining the RPD is shown in the Duplicate Sample section of the attached Calculation Methodology.

During a telephone conversation with Mr. Vincent Leopold (TCEQ TARA Group) on April 9, 1998, he requested a disk copy of the SUMMA Canister sampling results be included with the quarterly report. Enclosed is an electronic copy of the fourth quarter 2018 SUMMA Canister Report.





Should you have any questions please contact Vanessa Peppers by e-mail at VanessaP@ftpc.fpcusa.com.

Sincerely,

Rick Crabtree

Vice President/General Manager Formosa Plastics Corporation, Texas

Attachments

cc: Dr. Tracie Phillips

Toxicology Division

Texas Commission on Environmental Quality

Certified Mail: 7018 0360 0000 5327 9351

P. O. Box 13087

Austin, Texas 78711-3087

## FORMOSA PLASTICS CORPORATION, TEXAS

## SUMMA CANISTER QUARTERLY REPORT

## **CALCULATION METHODOLOGY**

Following is the calculation methodologies used to calculate the Year-To-Date Sum and Year-To-Date Average for the four SUMMA canister sampling sites. Please note, there are two columns associated with each component analyzed. The column titled "Actual" represents the results reported by the independent laboratory contracted to analyze the SUMMA canisters. The column titled "½ Reported LOD (Limit of Detection)" represents either the actual result or one-half the limit of detection reported by the laboratory, as appropriate.

## **ACTUAL**

The following is entered into the column titled "Actual":

Numerical Value - Actual results reported by the independent laboratory when the result is equal to or greater than the limit of detection. The numerical value is used to calculate the year-to-date sum and the year-to date average;

ND (Non Detect) - As reported by the laboratory. The value of "0" is used to calculate the year to date sum and the year-to-date average;

BDL (Below Detection Limit) - Entered when the actual result is less than the reported limit of detection. The value of "0" is used to calculate the year-to-date sum and the year-to-date average;

"\*" - Non operational sampling period.

## 1/2 REPORTED LOD (LIMIT OF DETECTION)

The following is entered into the column titled "1/2 Reported LOD":

Numerical Value - Actual results reported by the independent laboratory when the result is equal to or greater than the limit of detection. The numerical value is used to calculate the year-to-date sum and the year-to-date average;

½ the Reported Limit of Detection - ½ the reported limit of detection when the results are reported as non-detect and when the actual result is below the detection limit (BDL). ½ the reported limit of detection is used to calculate the year-to-date sum and the year-to-date average.

"\*" - Non operational sampling period.

## FORMOSA PLASTICS CORPORATION, TEXAS

## SUMMA CANISTER QUARTERLY REPORT

Limit of Detection (LOD) - Method Detection Limit, Limit of Detection, Reporting Limit, etc... as reported by the independent laboratory conducting the analysis.

## **DUPLICATE SAMPLES**

Beginning with the revised First Quarter 2004 Report, submitted on October 22, 2004, the duplicate samples will be reported discreetly on a separate VOC Canister Analysis Table. This is done so that the duplicate samples can be compared to the routine samples and the Relative Percent Difference (RPD) can be calculated. The RPD is calculated using the following equation:

$$\{(X1-X2)/[(X1+X2)/2]\}$$
 x 100

Mr. David Carmichael provided this equation in his August 20, 2004 e-mail request for changes. Where the duplicate and routine sample indicated "ND", the RPD is reported as "ND". Where the duplicate or routine sample indicated "ND" and the other indicated a concentration greater than ND, the RPD is calculated by using the value entered in the actual concentration column and the value entered in the ½ Reported LOD column.

## YEAR-TO-DATE SUM

The year-to-date sum is calculated by taking the sum of all values entered in the column.

## YEAR-TO-DATE AVERAGE

The following formula is used to calculate the year-to-date average:

Year-To-Date Sum / (Number of theoretical sample periods - Number of non operational sample periods)

## FORMOSA VOC CANISTER ANALYSIS 4th QUARTER 2018 POINT COMFORT - CITY HALL SITE

SAMPLE DATE	AVG.WIND	AVG.WIND	ETT	ETHYI ENE								
	DIRECTION	SPEED (mph)	Actual	1/2 Reported LOD	Actual	BUTADIENE 1/2 Benediction		BENZENE		VINYL CHLORIDE	TAIL LAND	
1/5/2018	(Degrees)		(qdd)	(pbp)	(qdd)	(ppb)		1/2 Reported LOD	Ac	1/2 Reported LOD		Actual 1/2 Percent 1 2
1/11/2018	coc	5.0	*	*	*	*	(add)	(qdd)	(qdd)	(qdd)		GOT patroday 7/1
1/17/2018	311	6.9	*	*	*	*		*	*	*	*	(add)
1/23/2018	375	7.0	*	*	*	*		*	*	*	*	*
1/29/2018	341	0.4	*	*	*	*	*	*	*	*	*	*
2/4/2018	161	5.0	*	*	*	*	*	*	*	*	*	**
2/10/2018	218	3.0	QN	0.0500	ND	0.1250	0.2470	*	*	×	*	*
2/16/2018	147	5.0	QN	0.0500	ND	0.1250	0.2470	0.2470	QN	0.0500	0.1070	02010
2/22/2018	315	3.1	ND	0.0500	ND	0.1250	0.4030	0.8060	0899'0	0.6680	ND	0.0500
2/28/2018	145	0.7	*	*	*	*	0.4030	0.4030	ND	0.0500	1.7000	0.0500
3/6/2018	211	10.1	QN	0.0500	0.377	0.3770	1 6500	*	*	*	*	**
3/12/2018	279	7.4	QN	0.0500	ND	0.1250	0.8430	1.6500	QN	0.0500	ND	0.0500
3/18/2018	125	5.1	QN	0.0500	ND	0.1250	0.5510	0.8420	0.4750	0.4750	0.2470	0.2470
3/24/2018	146	77	ON NE	0.0500	ON	0.1250	0.1690	0.5510	0.6320	0.6320	ND	0.0500
3/30/2018	126	7.1	ON ON	0.0500	QN	0.1250	0.2300	0.7300	QN II	0.0500	ND	0.0500
4/5/2018	96	5.6	ON ON	0.0500	ND	0.1250	0.4860	0.4860	ON	0.0500	ND	0.0500
4/11/2018	114	4.4	N. O. N.	0.0500	ND	0.1250	0.1990	0.4900	0.4690	0.4690	0.1390	0.1390
4/17/2018	144	67	ON	0.0500	QN	0.1250	0.3390	0.3360	QN	0.0500	0.1160	0.1160
4/23/2018	243	1.5.	ON ON	0.0500	QN	0.1250	0.3190	03100	0.1510	0.1510	0.1730	0.1730
4/29/2018	106	5.5	ON ON	0.0500	ND	0.1250	0.2270	0.2150	QN	0.0500	ND	0.0500
5/5/2018	320	3.5	ON NE	0.0500	ND	0.1250	0.1580	0.5270	2.5900	2.5970	0.8170	0.8170
5/11/2018	122	16	ON ON	0.0500	ND	0.1250	0.4130	0.1360	QN	0.0500	ND	0.0500
5/17/2018	159	6.0	QN.	0.0000	QN	0.1250	0.1340	0.1340	0.9900	0.9900	0.2730	0.2730
5/23/2018	96	5.2	*	0.0500	ND	0.1250	0.1250	0.1250	2	0.0500	QN	0.0500
5/29/2018	144	5.2	QN	1005000	*	*	*	*	*	0.0500	ND	0.0500
6/4/2018	169	4,4	QN	0.0500	QN	0.1250	0.1680	0.1680	NN	* 000	*	*
6/10/2018	140	8.8	ON	00500	ON AN	0.1250	0.1800	0.1800	0 1000	00000	0.1630	0.1630
6/16/2018	114	6.8	ND	0.0500	ON	0.1250	0.1750	0.1750	ND ON	0.0000	0.1030	0.1030
6/22/2018	151	4.9	ND	00500	ON	0.1250	ND	0.0500	S	0.0000	QN	0.0500
6/28/2018	143	7.0	ND	00500	ON	0.1250	0.2280	0.2280	GN	0.0000	QN	0.0500
1/4/2018	126	7.1	ND	0.0500	ON CAN	0.1250	0.2150	0.2150	QN	0.0500	0.1380	0.1380
7110/2018	121	4.6	N	0.0500	N. O. W.	0.1250	0.1020	0.1020	0.8600	0.6500	QN	0.0500
7/16/2018	153	5.9	N ON	0.0500	NO NO	0.1250	0.3820	0.3820	ND	0.0000	6.1100	6.1100
20272018	176	5.7	QN	0.0500	ON ON	0.1250	0.2210	0.2210	ND	0.650	ON O	0.0500
8/2/2018	133	4.0	ND	0.0500	ON ON	0.1250	0.1850	0.1850	ND	0.0500	0.1760	0.1760
8/0/2019	107	4.1	ND	0.0500	9	0.1250	ND	0.0500	ND	0.0500	N.P.	0.1990
8/17/2018	138	5.6	ND	0.0500	QN	0.1250	0.3850	0.3850	0.6580	0.6580	0.7690	0.0500
8/21/2018	155	0.0	QN	0.0500	ND	0.1250	O SOO	0.0500	ND	0.0500	QN	0.0500
8/29/2018	121	4.3	Q.	0.0500	QN	0.1250	0.000	0.2850	ND	0.0500	QN	0.0500
8/6/2018	16	8-1	ON ON	0.0500	ND	0.1250	ND	0.1220	QN	0.0500	ND	0.0500
9/12/2018	09	4.6	ON ON	0.0500	ND	0.1250	0.1930	0.0300	ON	0.0500	0.1020	0.1020
9/18/2018	187	1.3	*	0.0500	ND	0.1250	0.1530	0.1530	ND ND	0.7720	0986.0	0.9860
9/24/2018	115	4.5	ND	0.0500	× 1	*	*	*	*	0.0500	0.1100	0.1100
9/30/2018	65	2.2	ND	00000	ON CAN	0.1250	0.1490	0.1450	QN	00800	*	*
10/6/2018	126	7.1	*	*	ON.	0.1250	0.5390	0.5390	2.3200	2 3200	QN .	0.0500
10/12/2018	88	5.1	QN	0.0500		*	*	*	*	No.	1.2400	1.2400
10/18/2018	343	4.9	0.6490	0.0200	ON	0.1250	0.4490	0.4490	0.7060	0202.0	*	*
10/26/2018	249	1.5	0.6510	0.6510	ON ON	0.1250	0.6530	0.6530	0.9220	0,620	2.0900	2.0900
11/7/2018	324	6.2	*	*	*	0.1250	0.3480	0.3480	0.3960	0.3960	ND 01330	0.0500
11/1/2010	157	4.8	ND	0.0500	0.275	4	*	*	*	*	V.1.20V	0.1230
					Come to	0.2750	0.1720	0.1720	N.D	O Design		н

## FORMOSA VOC CANISTER ANALYSIS 4th QUARTER 2018 POINT COMFORT - CITY HALL SITE

SAMPLE DATE	AVG.WIND	AVG.WIND	ЕТН	ETHYLENE	1,3 BU	1,3 BUTADIENE	BEN	BENZENE	VINYL C	VINYL CHLORIDE	ETHYLENE	ETHYLENE DICHLORIDE
	DIRECTION (Degrees)	SPEED (mph)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (pob)	1/2 Reported LOD	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD
11/13/2018	321	7.6	ND	0.0500	ON	0.1250	01100	01100	N	(odd)	(add)	(add)
11/17/2018	88	4.5	*	*	*	*	*	W. 11.00	4	0.0000	ON	0.0500
11/25/2018	316	3.0	QN	00200	GN	03010	02000	02000	4		*	*
12/1/2018	240	27	GN.	0.0500	ON ON	0.100	0.2070	0.2070	ON	0,0500	QN	0.0500
01000001	100		and and	00000	dy.	0.1230	0.1730	0.1730	ND	0.0500	0.1220	0.1220
12/12/18	102	6.1	ND	0.0500	QN	0.1250	0.2320	0.2320	QN.	0.0500	ND	0.0500
12/13/2018	235	6.7	ND	0.0500	ND	0.1250	0.1500	0.1500	ND	0.0500	QN.	0.0500
12/19/2018	15	1.7	ND	0.0500	QN	0.1250	0.2280	0.2280	0.1510	0.1510	03110	01100
12/25/2018	106	5.9	ON	0.0500	QN	0.1250	0.1090	0.1090	GN	00000	ND	0.2110
12/31/2018	334	4.2	ON	0.0500	QN	0.1250	0.1970	0.1970	EN CENT	00500	ON ON	0.0300

	ETH	ETHYLENE	1,3 BUT	1,3 BUTADIENE	BEN	BENZENE	VINYLC	VINYL CHLORIDE	ETHYLENE	ETHYLENE DICHLORIDE	-
	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD	_
	(qdd)	(qdd)	(qdd)	(qdd)	(qdd)	(qdd)	(pdd)	(qdd)	(qdd)	(qdd)	_
Year-To-Date Sum	1.3000	3.6500	0.6520	6.5270	14.0230	14.2230	12.8690	14.5190	16.2140	17.5140	_
											_
Rolling Year Average	0.0265	0.0745	0.0133	0.1332	0.2862	0.2903	0.2626	0.2963	0.3309	0.3574	_
											_
Annual Average	0.0265	0.0745	0.0133	0.1332	0.2862	0.2903	0.2626	0.2963	0.3309	0.3574	_
											_
Number of theoretical sample periods	09	09	09	09	09	09	09	09	99	09	
Number of non operational sample periods	-11	=	11	=	11	11	11	=	=	1 =	

<sup>\* -</sup> non operational, data from the North site was used for Wind Direction and Wind Speed, if available

TCEQ Air Mon	TCEQ Air Monitoring Comparison Values (ppb)	alues (ppb)	Investigation
Chemical	ST	LT	Limit (ppb)
Vinyl Chloride	27,000	0.47	25
Ethylene Dichloride	94	0.72	29.7
Benzene	180	1.4	28.2
Ethylene	500,000	30	200
1, 3 Butadiene	1,700	6	25

## FORMOSA VOC CANISTER ANALYSIS 4th QUARTER 2018 POINT COMFORT - CITY HALL DUPLICATE SAMPLE SCHEDULE

Degree   D	SAMPLE DATE	AVG.WIND	AVG.WIND	ЕТН	ETHYLENE	1,3 BUT	1,3 BUTADIENE	BEN	BENZENE	VINYL	VINYL CHLORIDE	ETHVI ENE	ETHVI ENE DICHI OBIDE
1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990   1990		DIRECTION	SPEED (mph)	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD
11   11   11   11   11   11   11   1	ononco	(saalgari)		(qdd)	(qdd)	(qdd)	(qdd)	(qdd)	(qdd)	(qdd)	(qdd)	(qdd)	(qdd)
Charlet   Percent Difference (RPD)   ND   0.0500   ND   0.1250   0.1510   0.1500   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520   0.0520	02/10/18	94	5.4	QN	0.0500	ND	0.1250	0.8060	0908.0	0.6680	0.899.0	QN	0.0500
259   274   ND   0.0500   ND   0.1200   0.5510   0.6520     279   74   ND   0.0500   ND   0.1200   0.04600   0.5510   0.6520     284   279   74   ND   0.0500   ND   0.1200   0.04600   0.5310   0.6520     284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284   284	02/10/18 <sub>d</sub>	94	- 1	QN	0.0500	ND	0.1250	1.1600	1.1600	0.8460	0.8460	8	0.0500
146   279   24	Relativ	e Percent Difference	(RPD)	4	QD.	2	D			1	-23,5139		ND ON
279   74   ND   0.0500   ND   0.1290   0.4500   0.5300   0.53500													
National Percent Difference (RPD)	03/12/18	279	7.4	ND	0.0500	ND	0.1250	0.5510	0.5510	0.6320	0,6320	2	00500
146   147   148   149   149   148   149   148   149   148   149   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148   148	03/12/18 <sub>d</sub>	279	7.4	ND	0.0500	ND	0.1250	0.4600	0.4600	0.5360	0.5360	01140	0.0500
Machine Percent Difference (RPD)   ND   0.0500   ND   0.1250   0.2300   ND   0.0500   ND   0.1250   0.2300   ND   0.0500   ND   0.1250   0.2310   ND   0.0500   ND   0.1250   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.2310   0.231	Relativ	Percent Difference	(RPD)	4	Q.			1		1	1		0.1140
Aciative Percent Difference (RPD)         ND         0.0500         ND         0.1250         0.2300         ND           Aciative Percent Difference (RPD)         3.5         ND         0.0500         ND         0.1250         0.2310         ND           Aciative Percent Difference (RPD)         3.5         ND         0.0500         ND         0.1250         0.4330         0.0500         ND           Aciative Percent Difference (RPD)         3.5         ND         0.0500         ND         0.1250         0.4300         ND         0.1250         0.4300         ND           Aciative Percent Difference (RPD)         ND         0.0500         ND         0.1250         0.2300         ND         0.0500         ND         0.1250         0.2300         ND         0.2300         ND         0.2300         0.2300         ND         0.2300         0.2300								10.	0700	10	10.4384	-78	-78.0488
146   177   ND   0.0500   ND   0.1250   0.2310   0.2310   ND   ND   ND   ND   ND   ND   ND   N	03/24/18	146	7.7	QN	0.0500	CN	01250	0.0300	0 3300	9	00000		
Name	03/24/18 <sub>d</sub>	146	7.7	ND	0.0500	2	0.1250	0.2300	0.2300	ON ON	0.0500	Q	0.0500
State   Stat	Relative	Percent Difference	1		ı		1	П	i		0.0500	QN	0.0500
								-0-	4338		ND		ND
Scaline Percent Difference (RPD)	01/50/50	370	3.0	4	000000								
Stative Percent Difference (RPD)	01/07/07	320	3.3	ON	0.0500	ND	0.1250	0.4130	0.4130	0.9900	0.9900	0.2730	0.2730
114   8.9   ND   0.0500   ND   0.1250   0.2380   ND   0.1250   0.1280   0.1280   ND   0.1250   0.1280   0.1280   ND   0.1280   0.1280   ND   0.1280   0.1280   ND   0.1280   0.1280   ND   0.1280   0.1280   0.1080   ND   0.1080   ND   0.1280   0.1080   ND   ND   ND   ND   ND   ND   ND   N	03/03/18 <sub>d</sub>	320	- 1	1		ND	0.1250	0.3700	0.3700	1.2000	1.2000	0.1500	0.1500
114   8.9   ND   0.0300   ND   0.1250   ND   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.050	Relativ	Percent Difference	(RPD)	4	Q.	Z	D	10.	9834	-119	-19.1781		58.1560
114   8.9   ND   0.0500   ND   0.1250   ND   0.0500   ND   ND   ND   ND   ND   ND   ND													
114   8.9   ND   0.0500   ND   ND   ND   ND   ND   ND   ND	06/16/18	114	8.9	QN	0.0500	ND	0.1250	ND	0.0500	ND	0.0500	QN	0.0500
153   5.9   ND   0.0500   ND   0.1250   0.2210   0.2380   ND   ND   0.1250   0.2380   ND   ND   ND   0.1250   0.2380   ND   ND   ND   ND   0.1250   0.2380   ND   ND   ND   ND   ND   ND   ND   N	P81/91/90	114	- 1	ND	0.0500	ND	0.1250	QN	0.0500	ND	0.0500	QN	0.0500
153   5.9   ND   0.0500   ND   0.1250   0.2210   0.2380   ND   ND   0.1250   0.2380   ND   0.2380   ND   ND   0.1250   0.2380   ND   0.2380   ND   0.1250   0.2380   ND   0.2380   ND   0.1250   0.2380   ND   0.1250   0.2380   0.2380   ND   0.1250   0.2380   0.2380   ND   0.1250   0.1250   0.2380   0.2380   ND   0.1250   0.1250   0.2380   0.2380   ND   0.1250   0.1250   0.2380   0.1350   0.2380   0.2380   0.2380   0.2380   0.2380   0.2380   0.2380   0.2380   0.2380   0.2380   0.2380   0.2380   0.2380   0.2380   0.2380   0.2380   0.2380   0.2380   0.2380   0.2380   0.2380   0.2380   ND   0.2380   0.2380   0.2380   ND   0.2380   0.2380   ND   0.2380   ND   0.1250   0.1090   ND   0	Relative	Percent Difference	(RPD)	4	4D	Z	D	V	Q.		ND		ND
153   5.9   ND   0.0500   ND   0.1250   0.2210   0.2210   ND   ND   0.1250   0.2380   ND   ND   ND   ND   ND   ND   ND   N													
153   5.9   ND   0.0500   ND   0.1250   0.2380   ND   ND   ND   ND   ND   ND   ND   N	81/91/20	153	5.9	ON	0.0500	ND	0.1250	0.2210	0.2210	QN	0.0500	0.1760	01760
Actative Percent Difference (RPD)         ND         ND         0.1250         0.5390         0.5390         2.3200           Actative Percent Difference (RPD)         8.2         ND         0.00500         ND         0.1250         0.5390         0.5390         2.3200           Actative Percent Difference (RPD)         ND         ND         0.1250         0.5620         0.5300         2.3100           Actative Percent Difference (RPD)         *         *         *         *         *         *         *           Actative Percent Difference (RPD)         *         *         *         *         *         *         *         *         *           Actative Percent Difference (RPD)         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *	07/16/18 <sub>d</sub>	153	- 1	ND	0.0500	ND	0.1250	0.2380	0.2380	ND	0.0500	0.1720	0.1720
65   2.2   ND   0.0500   ND   0.1250   0.5390   0.5390   2.3300	Relative	Percent Difference	(RPD)	4	4D	Z	D	7.L	4074		ND	1	2 2989
65   2.2   ND   0.0500   ND   0.1250   0.5390   0.5390   2.3200     65   2.2   ND   0.0500   ND   0.1250   0.5620   0.5620   2.3100     84   85   8   8   8   8   8   8   8   8													
Column   C	09/30/18	65	2.2	ND	0.0500	ND	0.1250	0.5390	0.5390	2.3200	2,3200	1.2400	1.2400
Stative Percent Difference (RPD)	09/30/18 <sub>d</sub>	65				ND	0.1250	0.5620	0.5620	2.3100	2.3100	1.1400	1.1400
334   6.2	Relative	Percent Difference	(RPD)	4	Q	Z	D	-4.]	08/1	0.	0.4320	8.7	8.4034
334 6.2													
relative Percent Difference (RPD)         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *	11/01/18	324	6.2	*	*	*	*	*	*	*	*	*	*
relative Percent Difference (RPD)         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *	11/01/18 <sub>d</sub>	324	6.2	*	*	*	*	*		*	*	*	*
106   5.9 ND   0.0500 ND   0.1250   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0	Relative	Percent Difference	(RPD)		*				*		*		
106   5.9 ND   0.0500 ND   0.1250   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0.1090   0													
106 5.9 * * * * * * * * * * *	12/25/18	106	5.9	ON	0.0500	ND	0.1250	0.1090	0.1090	ND	0.0500	dN.	0.0500
Relative Percent Difference (RPD)	12/25/18 <sub>d</sub>	106		*	*	*	*	*	*	*	*	*	*
wemmer cuchin bundance (M.D.)	Relative	Percent Difference	(RPD)		*								

\* - non operational, data from the North site was used for Wind Direction and Wind Speed, if available

# FORMOSA VOC CANISTER ANALYSIS 4th QUARTER 2018 POINT COMFORT - FORMOSA TRAINING COMPLEX

SAMPLE DATE	AVG.WIND	AVG.WIND			1,3 BU	1,3 BUTADIENE	BE	BENZENE	VINYL	VINYL CHLORIDE	ETHYLENE	ETHYLENE DICHLORIDE
	(Degrees)	SPEED (mph)	Actual (ppb)	1/2 Reported LOD	Actual (nph)	1/2 Reported LOD	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD
1/5/2018	7.1	5.0	•		*	*	(odd)	(add)	(qdd)	(qdd)	(qdd)	(qdd)
1/11/2018	202	8.9			*							
1/17/2018	311	4.2	*									
1/23/2018	275	4.0	ON	0.0500	QN	0.1250	0.5740	0.5740	0.6610	0.6610	N.	0.0500
1/29/2018	341	5.6	ON	0.0500	QN	0.1250	0.1420	0.1420	QN	0.0500	S S	00000
2/4/2018	197	5.2	QN	0.0500	ND	0.1250	0.4520	0.4520	0.2290	0.2290	0.1430	0.1430
2/10/2018	218	3.8	QN.	0.0500	ON	0.1250	0.5940	0.5940	0.8710	0.8710	ND	0.0500
2/16/2018	147	5.1	ND	0.0500	ND	0.1250	0.1250	0.1250	ND	0.0500	2.9300	2 9300
2/22/2018	315	6.2	*		*	*				*	*	**
2/28/2018	145	10.1	QN	0.0500	0.371	0.3710	1.8500	1.8500	QN.	0.0500	0.1300	01300
3/6/2018	211	8.3	Q.	0.0500	ND	0.1250	0.9270	0.9270	1.5500	1.5500	0.2600	0.2600
3/12/2018	279	7.4	QN.	0.0500	ND	0.1250	0,4440	0.4440	0.1130	0.1130	QN	00500
3/18/2018	125	5.4	Q.	0.0500	ND	0.1250	0.2560	0.2560	QN	0.0500	QN	00200
3/24/2018	146	7.7	ND	0.0500	ND	0.1250	0.2090	0.2090	ND	0.0500	0.1270	0.1270
3/30/2018	126	7.1	Q.	0.0500	ND	0.1250	0.5750	0.5750	0.6040	0.6040	ND	0.0500
4/5/2018	96	5.6	ND	0.0500	ND	0.1250	0.2700	0.2700	0.3370	0.3370	0.3560	0.3560
4/11/2018	114	4,4	ND	0.0500	ND	0.1250	0.3620	0.3620	0.4940	0.4940	0.5740	0.5740
4/17/2018	144	6.6	ND	0.0500	ND	0.1250	0.1600	0.1600	ND	0.0500	0.1270	0.1270
4/23/2018	243	1.2	ND	0.0500	ND	0.1250	0.3330	0.3330	1.3800	1.3800	0.3610	0.3610
4/29/2018	901	5.5	ND	0.0500	ND	0.1250	0.1080	0.1080	ND	0.0500	QN	0.0500
5/5/2018	320	3.5	ND	0.0500	ND	0.1250	0.1030	0.1030	ND	0.0500	QN	0.0500
5/11/2018	122	9.1	ND	0.0500	ND	0.1250	0.1170	0.1170	ON	0.0500	QN	0.0500
5/17/2018	159	0.9	ND	0.0500	QN	0.1250	0.1250	0.1250	ND	0.0500	QN	0.0500
5/23/2018	9,6	5.2	*		*		*	*	*			
2/29/2018	144	5.2	QN	0.0500	ND	0.1250	0.1380	0.1380	QN	0.0500	0.1160	0.1160
6/4/2018	691	4,4	ND	0.0500	QN	0.1250	ND	0.0500	ND	0.0500	0.1160	0.1160
6/10/2018	140	8.8	ND	0.0500	QN.	0.1250	0.1450	0.1450	ND	0.0500	0.3220	0.3220
6/16/2018	114	8.9	QN	0.0500	QN.	0.1250	QN	0.0500	ND	0.0500	ND	0.0500
8/77/7018	151	4.9	QN	0.0500	ND	0.1250	0.1790	0.1790	ND	0.0500	0.1930	0.1930
8/78/7018	143	7.0	QN	0.0500	Q.	0.1250	0.1490	0.1490	ND	0.0500	0.3960	0.3960
7/10/2018	126	7.1		*						*	*	*
707/018	121	4.6	QN II	0.0500	QN	0.1250	0.2370	0.2370	ND	0.0500	ND	0.0500
7/16/2018	133	5.9	2	0.0500	Q.	0.1250	0.2580	0.2580	QN	0.0500	0.1030	0.1030
8102/27/	133	3.0	ON GIV	0.0500	ON I	0.1250	0.1080	0.1080	Q.	0.0500	0.1330	0.1330
8/3/2018	101	4.1	GN CN	0.0500	ON ON	0.1250	0.1810	0.1810	ND	0.0500	Q.	0.0500
8/9/2018	138	2.6	8	0.0500	ON ON	0.1230	0.2720	0.2720	1.6000	1.6000	0.1470	0.1470
8/17/2018	135	0.9	QN	0.0500	G G	0.1250	2 2	0.0500	ON ON	0.0500	0.1350	0.1350
8/21/2018	155	5.4	ND	0.0500	ND	0.1250	0.1340	0.1340	E S	0.0500	0.26970 ND	0.2090
8/29/2018	121	4.3	QN	0.0500	ND	0.1250	QN	0.0500	QN	0.0500	07010	0.000
9/6/2018	91	1.8	QN	0.0500	ND	0.1250	0.3340	0.3340	0.7480	0.7480	1.2500	1,2500
9/12/2018	09	4.6	ND	0.0500	ND	0.1250	QN	0.0500	QN	0.0500	011140	01140
9/18/2018	187	1.3									*	*
9/24/2018	115	4.5	QN	0.0500	ND	0.1250	0.1860	0.1860	ND	0.0500	ND	0.0500
9/30/2018	65	2.2	QN	0.0500	ND	0.1250	0.6890	0.6890	2.7400	2.7400	2.2600	2.2600
10/6/2018	126	7.1			*			*		*		
10/12/2018	88	5.1	QN	0.0500	ND	0.1250	0.4090	0.4090	1.3300	1.3300	3.9700	3.9700
10/18/2018	343	4.9	1.2200	1.2200	Q.	0.1250	0.5310	0.5310	1.3900	1.3900	ND	0.0500
10/26/2018	249	1.5					*			*		
11/1/2018	324	6.2	* 5				*			*		
11/17/2018	24	6.2	2 2	0.0500	9	0.1250	0.5490	0.5490	0.6790	0.6790	0.3280	0.3280
14111111111	200	2	ON!	OUCU.U	ND	0.1250	0.1320	0.1320	ON.	0.0500	QN	0.0500

# FORMOSA VOC CANISTER ANALYSIS 4th QUARTER 2018 POINT COMFORT - FORMOSA TRAINING COMPLEX

SAMPLE DATE	AVG.WIND	AVG.WIND			1,3 BU	1,3 BUTADIENE	BE	BENZENE	VINYL	VINYL CHLORIDE	ETHYLENE DICHLORIDE	ICHLORIDE
	(Degrees)	SPEED (mph)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD
11/23/2018	46	0.4	QN	0.0500	2	01050	01700	(add)	(odd)	(add)	(qdd)	(qdd)
91000011	115	30	4	000000	a.	0.120	0.2010	0.2610	0.7120	0.7120	0.6110	0.6110
010717111	140	3.2	ND	0.0500	0.272	0.2720	0.4590	0.4590	QN	0.0500	0.3840	0.3840
12/1/2018	240	2.7	QN	0.0500	ON.	0.1250	0.2100	0.2100	GN	0.0500	dN.	0.0000
12/7/2018	102	1.9	*		*		*		*	0000	ON!	OUCO.O
12/13/2018	235	6.7	ND	0.0500	GN.	01050	0.1570	0.1670	and a	00000		
12/19/2018	15	1.7	QN	0.0500	CZ.	01050	0.2440	0.000	ON O	00000	ON	0.0500
12050019	104	03	ALL VIEW	00000		0.11.0	0.2440	0.2440	0.1320	0.1320	0.4010	0.4010
010717777	100	5.5	UN	0.050.0	QN	0.1250	0.1430	0.1430	ND	0.0500	ON	0.0500
12/31/2018	334	4.2	ND	0.0500	ND	0.1250	0.2340	0.2340	QN	0.0500	QN	0.0500
			ETHN	ETHYLENE	1.3 BU	1.3 BUTADIENE	REN	BENZENE	LANIA	auto in		
							Т		AIMIL	VINTECHEORIDE	ETHYLENE DICHLORIDE	CHLORIDE
			(pob)	1/2 Keported LOD	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD
			100	(cdd)	(add)	(odd)	(add)	(add)	(qdd)	(qdd)	(qdd)	(qdd)
	Year-Lo-Date Sum		1.2200	3.6200	0.6430	6.5180	14.0650	14.3650	15.5700	17.1700	16.3580	17.4080
_	Rolling Year Average		0.0249	0.0739	0.0131	0.1330	0.2870	0.2932	0.3178	0.3504	0 3338	0.3553
	Annual Average		0.0249	0.0739	0.0131	0.1330	0.2870	0.2932	0.3178	0.3504	0.3338	0.3553
olumbar of theoretical came along	alorison alor		9	Š							00000	CCCC.O
most of uncoloured san	indic periods		00	09	09	09	09	09	09	09	09	09
Number of non operational sample periods	al sample periods		11	11	11	11	11	11	11	- 1	-	

<sup>\* -</sup> non operational, data from the North site was used for Wind Direction and Wind Speed, if available

TCEQ Air Mon	TCEQ Air Monitoring Comparison Values (ppb)	(pbp)	Investigation
Chemical	ST	LT	Limit (ppb)
Vinyl Chloride	27,000	0.47	25
Ethylene Dichloride	94	0.72	29.7
Benzene	180	1.4	28.2
Ethylene	200,000	30	200
1.3 Butadiene	1.700	6	36

# FORMOSA VOC CANISTER ANALYSIS 4th QUARTER 2018 POINT COMFORT - FORMOSA TRAINING COMPLEX DUPLICATE SAMPLE SCHEDULE

SAMPLE DATE		AVG.WIND	ETh	ETHYLENE	1,3 BU	1,3 BUTADIENE	BE	BENZENE	VINVI	VINVI CHLORIDE	THUY! END	amao mom ana inna
	DIRECTION	SPEED (mph)	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD						
000000	(roegrees)		(gdd)	(qdd)	(qdd)	(qdd)	(qdd)	(qdd)	(qdd)	(qdd)	(qdd)	(qaa)
02/04/18	197	5.2	ND	0.0500	ND	0.1250	0.4520	0.4520	0.2290	0.2290	0.1430	0.1430
02/04/18d	197	5.2	QN	0.0500	ND	0.1250	0.8140	0.8140	0305.0	0,000,0	0.000	0.1430
Relat	Relative Percent Difference (RPD)	e (RPD)		QN ON		ND ON	П	27 1000	Т	0.5200	0.2240	0.2240
								7.1000	ç.	-34.9550	-44	-44.1417
03/06/18	211	8.3	dy.	00500	4		7.7					
03/06/194	110	0.0	CIVI .	0.0300	ND	0.1250	0.9270	0.9270	1.5500	1.5500	0.2600	0.2600
03/00/180	7117	8.3	QN	0.0500	ND	0.1250	0.9640	0.9640	1.6900	1.6900	0.2860	09800
Kelai	Kelative Percent Difference (RPD)	e (RPD)		ND	_	ND	-3	.3.9133	8-	-8.6420		-9.5238
07/22/18	176	5.7	ND	0.0500	ND	0.1250	0.1080	0.1080	QN	00500	0.1330	0 1330
07/22/18d	176	5.7	ND	0.0500	QN	0.1250	01100	01100	e da	00000	0.1330	0.1330
Relat	Relative Percent Difference (RPD)	(RPD)		CN.		NIN.	1	1	ON	0.0500	0.1490	0.1490
						9	6-	9.6916		ND	11:	-11.3475
01/00/100	130	100	-	100000								
0000000	130	2.0	ND	0.0500	ND	0.1250	ND	0.0500	ND	0.0500	0.1350	0.1350
D81760/80	138	5.6	QN	0.0500	ND	0.1250	ND	0.0500	ND	0.0500	0.1750	01750
Relat	Relative Percent Difference (RPD)	e (RPD)		ND	2	ND		ND		S	Г	35 906.50
												COOR
09/12/18	09	4.6	QN	0.0500	ND	0.1250	QN	0.0500	8	0.050.0	11110	9
09/12/18d	09	4.6	ND	0.0500	ND	0.1250	QN	0.0500	ON ON	0.0500	0.1130	0.1140
Relat	Relative Percent Difference (RPD)	: (RPD)		ON	2	ND		ON ON		OUCO.O		0.1130
										ON ON	0.5	0.8811
10/18/18	343	4.9	1.2200	1.2200	QN	0.1250	0.5310	0.5310	1 3000	00001	-	
10/18/18 <sub>d</sub>	343	4.9	0.5900	0.5900	ND	0.1250	0.4390	0.2310	1.3900	00671	ON S	0.0500
Relati	Relative Percent Difference (RPD)	(RPD)	69	69 6133			Т	ı	П	00#6"	ND	0.0500
				CCIO	4	IND	18	18.9691	3.	3.6630	-	ND

d - Duplicate sample taken in addition to the routine sample (See Calculation Methodology for information on inclusion of duplicate sample results.)

<sup>\* -</sup> non operational, data from the North site was used for Wind Direction and Wind Speed, if available

## FORMOSA VOC CANISTER ANALYSIS 4th QUARTER 2018 POINT COMFORT - PARK SITE

SAMPLE DATE	AVG.WIND	AVG.WIND	ETH	ETHYLENE	1,3 BU	1,3 BUTADIENE	BEN	BENZENE	VINYLC	VINYL CHLORIDE	ETHYLENE	ETHYLENE DICHLORIDE
	DIRECTION	SPEED (mph)	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD						
	(Degrees)		(qdd)	(qdd)	(qdd)	(qdd)	(qdd)	(pdd)	(qdd)	(qdd)	(qdd)	(qdd)
1/5/2018	7.1	5.0	*	*	*	*	*	*	*	*	*	*
1/11/2018	202	8.9	*	*	*	*	*	*	*	*	*	*
1/17/2018	311	4.2	*	*	*	*	*	*	*	*	*	*
1/23/2018	275	4.0	ND	0.0500	ND	0.1250	0.4990	0.4990	0.7540	0.7540	QN	0.0500
1/29/2018	341	5.6	ND	0.0500	ND	0.1250	0.2730	0.2730	QN	0.0500	QN	0.0500
2/4/2018	197	5.2	NΩ	0.0500	ND	0.1250	0.2950	0.2950	0.2240	0.2240	QN	0.0500
2/10/2018	218	3.8	ΩN	0.0500	ND	0.1250	0.3350	0.3350	0.3040	0.3040	ΔÑ	0.0500
2/16/2018	147	5.1	QN	0.0500	ND	0.2500	0.1040	0.1040	ΩN	0.0500	ΔN	0.0500
2/22/2018	315	6.2	ΩN	0.0500	ND	0.1250	0.5570	0.5570	2.6200	2.6200	QN	0.0500
2/28/2018	145	10.1	ΩN	0.0500	ND	0.1250	1.0400	1.0400	ΩN	0.0500	0.1050	0.1050
3/6/2018	211	8.3	ΩN	0.0500	ND	0.1250	0.6710	0.6710	1.1100	1.1100	0.2140	0.2140
3/12/2018	279	7.4	QN	0.0500	ND	0.1250	0.4470	0.4470	0.4200	0.4200	0.3760	0.3760
3/18/2018	125	5.4	ND	0.0500	ND	0.1250	0.1820	0.1820	ΩN	0.0500	QN.	0.0500
3/24/2018	146	7.7	ND	0.0500	ND	0.1250	0.2610	0.2610	QN	0.0500	QN	0.0500
3/30/2018	126	7.1	ND	0.0500	ND	0.1250	0.3940	0.3940	1.0300	1.0300	₽.	0.0500
4/5/2018	96	5.6	ND	0.0500	QN	0.1250	0.2170	0.2170	1.3200	1.3200	1.2200	1.2200
4/11/2018	114	4.4	ND	0.0500	ND	0.1250	0.5800	0.5800	1.4100	1.4100	1.1100	1.1100
4/17/2018	144	9.7	ND	0.0500	ND	0.1250	0.2230	0.2230	Ð	0.0500	QN	0.0500
4/23/2018	243	1.2	ΩN	0.0500	ND	0.1250	0.5180	0.5180	0.3960	0.3960	N.	0.0500
4/29/2018	106	5.5	ΩN	0.0500	ND	0.1250	0.2900	0.2900	QN	0.0500	0.1550	0.1550
5/5/2018	320	3.5	ND	0.0500	ND	0.1250	ND	0.0500	ND	0.0500	ND	0.0500
5/11/2018	122	9.1	ND	0.0500	QN	0.1250	0.1190	0.1190	ND	0.0500	ND	0.0500
5/17/2018	159	0.9	ΩN	0.0500	ND	0.2500	0.1250	0.1250	ND	0.0500	ND	0.0500
5/23/2018	96	5.2	*	*	*	*	*	*	*	*	*	*
5/29/2018	144	5.2	ND	0.0500	ND	0.1250	ND	0.0500	ND	0.0500	0.1840	0.1840
6/4/2018	169	4.4	QN	0.0500	ND	0.1250	0.1130	0.1130	0.1540	0.1540	0.1630	0.1630
6/10/2018	140	8.8	ND	0.0500	ΩN	0.1250	ND	0.0500	ND	0.0500	0.1360	0.1360
6/16/2018	114	8.9	ND	0.0500	ΩN	0.1250	ND	0.0500	ND	0.0500	ND	0.0500
6/22/2018	151	4.9	ND	0.0500	ΩN	0.1250	0.1380	0.1380	ND	0.0500	0.2250	0.2250
6/28/2018	143	7.0	ND	0.0500	ND	0.1250	ND	0.0500	ND	0.0500	ND	0.0500
7/4/2018	126	7.1	ND	0.0500	ND	0.1250	0.3940	0.3940	1.0300	1.0300	ND	0.0500
7/10/2018	121	4.6	ND	0.0500	ND	0.1250	0.1750	0.1750	ND	0.0500	ND	0.0500
7/16/2018	153	5.9	QN	0.0500	ND	0.1250	0.1600	0.1600	ND	0.0500	0.1010	0.1010
7/22/2018	176	5.7	ND	0.0500	ND	0.1250	0.1020	0.1020	ΩN	0.0500	ND	0.0500
7/28/2018	133	4.0	ND	0.0500	ND	0.1250	0.2490	0.2490	0.2380	0.2380	0.6500	0.6500
8/3/2018	107	4.1	ND	0.0500	ND	0.1250	0.3470	0.3470	1.1700	1.1700	0.6730	0.6730
8/9/2018	138	5.6	ND	0.0500	ND	0.1250	ND	0.0500	ND	0.0500	ND	0.0500
8/17/2018	135	0.9	ND	0.0500	ND	0.1250	0.1150	0.1150	ND	0.0500	ND	0.0500
8/21/2018	155	5.4	ND	0.0500	ND	0.2500	ND	0.0500	ND	0.0500	ND	0.0500
8/29/2018	121	4.3	ND	0.0500	ND	0.1250	0.1940	0.1940	ND	0.0500	0.1040	0.1040
9/6/2018	91	1.8	ND	0.0500	ΩN	0.1250	0.1080	0.1080	0.3670	0.3670	0.1590	0.1590
9/12/2018	09	4.6	*	*	*	*	*	*	*	*	*	*
9/18/2018	187	1.3	ND	0.0500	ND	0.1250	0.5080	0.5080	ND	0.0500	0.3570	0.3570
9/24/2018	115	4.5	*	*	*	*	*	*	*	*	*	*
9/30/2018	65	2.2	*	*	*	*	*	*	*	*	*	*

## FORMOSA VOC CANISTER ANALYSIS 4th QUARTER 2018 POINT COMFORT - PARK SITE

SAMPLE DATE	AVG.WIND	AVG.WIND		ETHYLENE	1,3 BU	1,3 BUTADIENE	BEN	BENZENE	VINYLC	VINYL CHLORIDE	ETHYLENE	ETHYLENE DICHLORIDE
	DIRECTION (Degrees)	SPEED (mph)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (pob)	1/2 Reported LOD	Actual (nnh)	1/2 Reported LOD	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD
10/6/2018	126	7.1		*	*	*	(add)	(add)	(add)	(add)	(qdd)	(qdd)
10/12/2018	88	5.1	ND	0.0500	ND	0.1250	0.2730	0.2730	00020	00000	2000	*
10/18/2018	343	4.9	0.5680	0.5680	ND	0.1250	0.8150	0.8150	2 0600	2 0,500	0.1360	7.3000
10/26/2018	249	1.5	0.5910	0.5910	QN	01250	02160	0.0160	NID.	2.0000	0.1260	0.1260
11/1/2018	324	6.2	ND	0.0500	ND	0.1250	00000	0.0000	0.7290	0.0300	ON	0.0500
11/7/2018	157	4.8	ND	0.0500	GN	01050	NN	00000	V.2360	0.2380	00000	0.6500
11/13/2018	321	7.6	ND	0.0500	ND	01250	0.1430	0.0200	ON ON	0.0000	NO NO	0.0500
11/17/2018	88	4.5	*	*	*	*	*	00110	a.	0.020.0	ND	0.0500
11/25/2018	316	3.0	ON	00500	No.	0 1000	0.4940				*	*
oron no.	0.0	0.0	O. I	00000	ON	0.1230	0.4350	0.4350	0.4050	0.4050	0.7780	0.7780
12/1/2018	240	2.7	ND	0.0500	ND	0.1250	0.1660	0.1660	ND	0.0500	QN	0.0500
12772018	102	1.9	QN	0.0500	ND	0.1250	0.2060	0.2060	ND	0.0500	QN	0.0500
12/13/2018	235	6.7	ND	0.0500	ND	0.1250	0.1180	0.1180	ND	0.0500	CN	00500
12/19/2018	15	1.7	ND	0.0500	ND	0.1250	0.2070	0.2070	0.3010	0.3010	00000	0.0000
12/25/2018	106	5.9	ND	0.0500	ND	0.1250	0.1430	0.1430	ND	0.0500	GN	00000
12/31/2018	254	3.2	ND	0.0500	ND	0.1250	0.2350	0.2350	ND	0.0500	CN	0.0500

	ETH	ETHYLENE	1,3 BU	1,3 BUTADIENE	BEN	BENZENE	VINYL CHLORIDE	HLORIDE	FTHVLENE	ETHYLENE DICHLORIDE
	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD
	(qdd)	(qdd)	(qdd)	(qdd)	(qdd)	(qdd)	(qdd)	(qaa)	(qaa)	(quu)
Year-To-Date Sum	1.1590	3.6090	0.0000	6.7500	12.6900	13.0900	18,2710	19.8210	15 7760	17 2760
									001101	001411
Rolling Year Average	0.0227	0.0708	0.0000	0.1324	0.2488	0.2567	0.3583	0.3886	0.3093	0.3387
Annual Average	0.0227	0.0708	0.0000	0.1324	0.2488	0.2567	0.3583	0 3886	0.3003	0.2367
							20000	00000	0.000.0	0.3367
tumber of theoretical sample periods	09	09	09	09	09	09	09	09	09	99
fumber of non operational sample periods	6	6	6	6	6	6	6	6	6	6

Number of theoretical sample perious
Number of non operational sample periods

\* - non operational, data from the North site was used for Wind Direction and Wind Speed, if available

TCEQ Air Monit	itoring Comparison Values (	alues (ppb)	Investigation
Chemical	ST	LT	Limit (ppb)
Vinyl Chloride	27,000	0.47	25
Ethylene Dichloride	94	0.72	29.7
Benzene	180	1.4	28.2
Ethylene	200,000	30	200
1, 3 Butadiene	1,700	6	25

## FORMOSA VOC CANISTER ANALYSIS 4th QUARTER 2018 POINT COMFORT - PARK SITE DUPLICATE SAMPLE SCHEDULE

SPEED (mph)   Actual (12 Reported LOD)   Actual (12 Reported LOD)   Actual (12 Reported LOD)   Actual (12 Reported LOD)   (9ph) (12 Reported LOD)   (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200) (1200)	SAMPLE DATE		AVG.WIND	ETH	ETHYLENE	1,3 BUT	1,3 BUTADIENE	BEL	BENZENE	VINYL	VINYL CHLORIDE	ETHYLENE	ETHYLENE DICHLORIDE
1.22   2.25   2.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00		DIRECTION	SPEED (mph)	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD
1.25   4.0   ND   0.0500   ND   0.1250   0.4990   0.4990   0.07940   0.07940   ND   0.0500   ND   0.0500   ND   0.01250   0.0500   ND   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250   0.01250	0170010	(Saadarr)		(qdd)	(qdd)	(qdd)	(qdd)	(qdd)	(qdd)	(qdd)	(qdd)	(qdd)	(qdd)
1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2	01/23/18	273	4.0	QN	0.0500	ND	0.1250	0.4990	0.4990	0.7540	0.7540	QN	0.0500
145   101   ND   0.0500   ND   0.1250   1.0400   ND   0.0500   0.10500   ND   0.1250   1.0400   ND   0.0500   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040	01/23/18 <sub>d</sub>	275	4.0	ND	0.5000	ND	0.1250	0.5020	0.5020	0.7230	0.7230	QN.	0.0500
145   161   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181   181	Relati	ive Percent Difference	(RPD)		ND	_	4D	-0-					ND
145   101   ND   0.0500   ND   0.1250   1.1200   ND   0.0500   ND   0.1250   1.1200   ND   0.0500   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040   0.1040													
145   10.1   ND   0.0500   ND   0.1200   1.1200   1.1200   ND   0.0500   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0.01400   0	02/28/18	145	10.1	ND	0.0500	QN	0.1250	1.0400	1.0400	GN.	0.0500	0501.0	0301.0
Columno Per Per cont Difference (RPD)         ND         ND         ND         0.1250         0.2490         0.2360         0.2380         0.2380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380         0.6380	02/28/18 <sub>d</sub>	145	10.1	ND	0.0500	ND	0.1250	1.1200	1.1200	GN.	0.0500	0.1440	0.1030
133   4.0   ND   0.0500   ND   0.1250   0.2490   0.2490   0.2390   0.2380   0.6580   0.6580   0.6580   0.6580   0.6580   0.2580   0.2580   0.2580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6580   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680   0.6680	Relati	ive Percent Difference	; (RPD)		ND		9						21 2262
133   4.0   ND   0.0500   ND   0.1250   0.2490   0.2490   0.2380   0.2380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380   0.6380												10.	
133   4.0   ND   0.0500   ND   ND   0.1250   0.2500   0.2500   0.2500   0.2500   0.0500   0.0500   0.0500   0.0500   ND   0.05	07/28/18	133	4.0	ND	0.0500	QN	0.1250	0.2490	0.2490	0.2380	0.2380	0.6500	0.6500
	07/28/18 <sub>d</sub>	133	4.0	ND	0.0500	ND	0.1250	0.2500	0.2500	0.2350	0.2350	0,6300	0,000
121   4.3   ND   0.0500   ND   0.1350   ND   0.1350   ND   0.0500   ND   0.0500   ND   0.0500   ND   0.0500   ND   0.0500   0.1040   0.1940   ND   0.0500   ND   0.0500   0.1040   0.0500   ND   0.0500   ND   0.0500   0.1040   0.1040   ND   0.0500   ND	Relati	ive Percent Difference	(RPD)		ND			Г	1	1		1	-
121   4.3   ND   0.0500   ND   0.1250   ND   0.1940   ND   0.0500   ND   0.0500   ND   0.0500   0.1080     121   4.3   ND   0.0500   ND   0.1250   ND   0.0500   ND   0.0500   ND   0.0500   0.1080     187   1.3   ND   0.0500   ND   0.1250   0.5080   ND   0.5080   ND   0.0500   0.2820     187   1.3   ND   0.0500   ND   0.1250   0.5080   ND   0.0500   0.2820     187   1.3   ND   0.0500   ND   0.1250   0.2940   0.2940   ND   0.0500   0.2820     187   1.3   ND   0.0500   ND   0.1250   0.2730   0.2730   0.2730   0.2730     187   1.3   ND   0.0500   ND   0.1250   0.2730   0.2730   0.2730   0.2730     188   198   199   ND   0.0500   ND   0.1250   0.2060   ND   0.0500   ND   0.0500     189   199   ND   0.0500   ND   0.1250   0.2060   ND   0.0500   ND   0.0500   ND     180   102   1.9   ND   0.0500   ND   0.1250   0.2060   ND   0.0500   ND   0.0500   ND     180   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190     180   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190								2			7093		1.8634
121   4.3   ND   0.0500   ND   0.1250   ND   118.028   ND   0.0500   ND   0.0500   ND   0.0500   ND   0.0500   0.1080   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260   0.1260	08/29/18	121	4.3	QN	0.0500	ND	0.1250	0.1940	0.1940	CN	00500	01040	0.1040
Relative Percent Difference (RPD)         ND         ND         0.05500         ND         0.1250         0.5080         0.5080         ND         0.0500         ND         0.1250         0.5080         0.5080         ND         0.0500         0.0500         ND         0.0500         ND         0.1250         0.5080         ND         0.0500         0.0500         ND         0.1250         0.5040         ND         0.0500         0.0500         ND         0.1250         0.2730         0.2730         ND         0.0500         0.0280         0.0500         0.0500         ND         0.1250         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730         0.2730	08/29/18 <sub>d</sub>	121	4.3	ND	0.0500	ND	0.1250	ND	0.0500	QN ON	0.0500	0.1040	0.1040
187   1.3   ND   0.0500   ND   0.1250   0.5980   0.5980   ND   0.05800   0.3570	Relati	ive Percent Difference	(RPD)		ND		D.	118	3.0328				-3 7736
187   1.3   ND   0.0500   ND   0.1250   0.5080   0.5080   ND   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   0.0500   ND													000
187   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113   113	09/18/18	187	1.3	ND	0.0500	ND	0.1250	0.5080	0.5080	QN	0.0500	0.3570	0.3570
Celative Percent Difference (RPD)         ND         ND         0.1250         0.2730         0.2730         2.7200         7.200         7.3000           Aclative Percent Difference (RPD)         1.23         1.20         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2	09/18/18	187	1.3	ND	0.0500	ND	0.1250	0.5940	0.5940	QN	0.0500	0.2820	0.2820
123   7.0   ND   0.0500   ND   0.1250   0.2730   0.2730   0.2730   0.2730   0.2730   0.2730   0.2730   0.2730   0.2730   0.27300   0.2730   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27300   0.27	Relati	ive Percent Difference	(RPD)	Y ALL T	ND	4	(I)	-15	0809				23.4742
123   7.0   ND   0.0500   ND   0.1250   0.2730   0.2730   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200   2.7200													
123   7.0   x   x   x   x   x   x   x   x   x	10/14/18	123	7.0	ND	0.0500	ND	0.1250	0.2730	0.2730	2.7200	2,7200	73000	73000
Relative Percent Difference (RPD)         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *	10/14/18 <sub>d</sub>	123	7.0	×	*	*	*	*	*	*	*	*	*
102   1.9   ND   0.0500   ND   0.1250   0.2060   0.2060   ND   0.0500   ND   ND   0.0500   ND   ND   ND   ND   ND   ND   ND	Relati	ve Percent Difference	(RPD)		*		×		*		*		*
102   1.9   ND   0.0500   ND   0.1250   0.2060   0.2060   ND   0.0500   ND   ND   ND   ND   ND   ND   ND													
102   1.9	12/07/18	102	1.9	ND	0.0500	ND	0.1250	0.2060	0.2060	ND	0.0500	GN	0.0500
	12/07/18 <sub>d</sub>	102		**	*		*	H	*	*	*	*	*
	Relati	ve Percent Difference	(RPD)		*		*		*		*		42

d - Duplicate sample taken in addition to the routine sample (See Calculation Methodology for information on inclusion of duplicate sample results.)

<sup>\* -</sup> non operational, data from the North site was used for Wind Direction and Wind Speed, if available

SAMPLE DATE	AVG.WIND	AVG.WIND	ETHY	ETHYLENE	1.3 BUT.	1.3 BUTADIENE	NEW	BENZENE	S IAMA	m opine		
	DIRECTION	SPEED (mph)	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD	Actual	1/2 Reported 1 OD	VINYL	VINYL CHLOKIDE	ETHYLENE	ETHYLENE DICHLORIDE
	(Degrees)		(qdd)	(qdd)	(qdd)	(qdd)	(qdd)	(qdd)	(bpb)	1/2 Reported LOD	Actual (nnh)	1/2 Reported LOD
1/1/2018	345	8.7	ND	0.0500	ND	0.1250	0.4340	0.4340	0.1340	0.1340	(add)	(ndd)
1/3/2018	289	5.1	QN	0.0500	ND	0.1250	0.1280	0.1280	QN.	0.0500	2	0.0500
1/5/2018	11,	5.0	*	*	*	*	*	*	*	*	*	*
1,02018	119	5.7	2	0.0500	Ð	0.1250	0.1080	0.1080	ND	0.0500	QN.	0.0500
1/9/2018	146	5.6	Q.	0.0500	Ð	0.1250	1.1000	1.1000	0.2570	0.2570	0.3910	0.3910
1/11/2018	202	8.9	QN	0.0500	QV	0.1250	0.1960	0.1960	ON	0.0500	0.7240	0.7240
1/15/2018	242	6.9	2	0.0500	QN	0.1250	0.9340	0.9340	1.5400	1.5400	1.7900	1.7900
1/13/2018	89	6.6	QN	0.0500	Q	0.1250	0.1030	0.1030	ND	0.0500	0.1370	0.1370
1/1//2018	311	4.2	Q	0.5000	g	0.1250	1.2900	1.2900	1.0200	1.0200	0.1850	0.1850
1/19/2018	\$ 5	6.7	QN	0.0500	Q	0.1250	0.5730	0.5730	2.6500	2.6500	2.6000	2.6000
1/21/2018	126	7.5	Q.	0.0500	ND	0.1250	ND	0.0500	£	0.0500	Ð	0.0500
1/23/2018	275	4.0	Q.	0.0500	ND	0.1250	0.6400	0.6400	0.4360	0.4360	0.3610	0.3610
1/25/2018	114	6.3	10.5000	10.5000	ND	0.7500	1.2400	1.2400	3.5900	3.5900	2.5100	2.5100
1/27/2018	121	4.4	5.4500	5.4500	ND	0.7500	1.5600	1.5600	1.6800	1.6800	6.9100	6.9100
1/29/2018	341	5.6	Q.	0.0500	ND	0.1250	0.8990	0.8990	1.0400	1.0400	Ð	0.0500
1/31/2018	131	5.9	Ð	0.0500	QN	0.1250	0.3660	0.3660	Ð	0.0500	Q	0.0500
2/2/2018	146	8.4	Ω	0.0500	QN.	0.1250	0.8700	0.8700	0.6390	0.6390	0.6030	0.6030
2/4/2018	197	5.2	*	*	*	*	*	*	*	*	*	*
2/6/2018	102	6.0	Q	0.0500	ND ON	0.1250	0.2270	0.2270	0.2520	0.2520	1.4000	1 4000
2/8/2018	268	5.0	Ð	0.0500	QN	0.1250	0.9460	0.9460	1.0600	1.0600	0.2510	0.7510
2/10/2018	218	3.8	Ð	0.0500	QN	0.1250	2.0700	2.0700	0.7500	0.7500	0.2350	0.2350
2/12/2018	248	8.7	Ð	0.1000	QN Q	0.2500	0.9700	0.9700	0.9820	0.9820	Ð	0.0500
2/14/2018	206	3.9	Ð	0.0500	QN	0.1250	1.6800	1.6800	1.4900	1.4900	0.5790	0.5790
2/16/2018	147	5.1	Q	0.0500	Ð.	0.1250	0.2400	0.2400	0.1520	0.1520	Ð	0.0500
2/18/2018	118	7.0	Q.	0.0500	Ð	0.1250	0.7060	0.7060	3.4300	3.4300	1.9200	1.9200
2/20/2018	SII	9.6	9	0.0500	0.3320	0.3320	0.1010	0.1010	ND	0.0500	Ð	0.0500
27272018	CIS	6.2	*	*	*	*	*	*	*	*	*	*
2/24/2018	141	8.8	QV	0.0500	Ð	0.1250	ND	0.0500	ΝD	0.0500	Ð	0.0500
2/26/2018	156	8.2	S	0.0500	QN.	0.1250	0.1620	0.1620	QN	0.0500	£	0.0500
375/2018	145	10.1	Q.	0.0500	Ð	0.1250	0.4650	0.4650	ND	0.0500	N.	0.0500
3/2/2018	159	8.1	Q.	0.0500	Q.	0.1250	1.2600	1.2600	1.5700	1.5700	1.6000	1.6000
3/4/2018	105	8.5	*	*	*	*	*	*	*	*	*	*
3/6/2018	7117	8.3	QN	0.0500	9	0.1250	0.8900	0.8900	1.4700	1.4700	0.6650	0.6650
3/10/2018	60	0./	0.9900	0.9900	Đ.	0.1250	Ð	0.0500	4.6100	4.6100	2.3000	2.3000
3/12/2018	276	0.7	QN ,	0.0500	Q ·	0.1250	0.1790	0.1790	N Q	0.0500	ND	0.0500
3/14/2018	150	7.4		0000	* !	*	*	*	*	*	*	*
3/14/2018	150	3.1	ON E	0.0500	QN !	0.1250	1.0800	1.0800	4.8300	4.8300	0.5480	0.5480
3/19/2010	132	0.8	ON E	0.0500	9	0.1250	0.2110	0.2110	ND	0.0500	ND	0.0500
3/20/2010	123	3.4	ON E	0.0500	Q.	0.1250	0.1480	0.1480	ND	0.0500	ND	0.0500
3/20/2010	100	0.1	S	0.0500	2	0.1250	0.7890	0.7890	3.5800	3.5800	0.3810	0.3810
3/24/2018	102	0.7	QV E	0.0500	2 5	0.1250	0.3950	0.3950	Ð	0.0500	ND	0.0500
3/26/2018	1240	7.7	QN &	0.0500	9 5	0.1250	0.1390	0.1390	Ð	0.0500	ND	0.0500
3/20/2010	124	10.2	ON I	0.0500	2	0.1250	0.1600	0.1600	ND PD	0.0500	ND ND	0.0500
3/20/2010	150	7.6	ON S	0.0500	2	0.1250	0.1480	0.1480	ND	0.0500	ND	0.0500
3/30/2010	120	7.1	QN.	0.0500	8	0.1250	0.2900	0.2900	0.4610	0.4610	0.1430	0.1430
4/1/2018	120	8.0	2 4	0.0500	2	0.1250	Ð	0.0500	ND	0.0500	ND	0.0500
8102/5/17	140	C./	QN E	0.0500	Q !	0.1250	0.1130	0.1130	ND DI	0.0500	QN	0.0500
4777018	33.1	3.0	Q. £	0.0500	2	0.1250	0.1540	0.1540	1.0500	1.0500	1.2200	1.2200
4/9/2018	32	). Y	0.005 (	0.0300	Q E	0.1250	0.2520	0.2520	0.1070	0.1070	QN	0.0500
4/11/2018	114	2.1	000C-7	2.2800	2 2	0.1250	QN S	0.0500	4.9200	4.9200	2.4400	2.4400
1 010-111			QVI	WCU.U	ND	0.1250	0.2320	0.2320	0.2140	0.2140	0.4920	0.4920

SAMPLE DATE	AVG.WIND	AVG.WIND		ETHYLENE	1,3 BUT.	1,3 BUTADIENE	BEN	BENZENE	VINYLC	VINYL CHLORIDE	ETHVI ENE	ETHYI ENE DICHI OPINE
	(Degrees)	SPEED (mph)	Actual (ppb)	1/2 Reported LOD (npb)	Actual (nph)	1/2 Reported LOD	Actual (mph)	1/2 Reported LOD	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD
4/13/2018	142	10.2	ND	0.0500	GA.	0.1250	(add)	(add)	(qdd)	(qdd)	(qdd)	(qdd)
4/15/2018	305	3.0	Ð	0.0500	2	0.1250	0.3520	0.0500	ND 0 1540	0.0500	2	0.0500
4/17/2018	144	7.6	ND	0.5000	Ð	0.1250	0.1650	0.1650	0.1040	0.1640	2	0.0500
4/19/2018	48	3.3	ΩN	0.0500	ND	0.1250	09090	0909:0	0.4210	0.4210	0 1940	0.0500
4/21/2018	108	6.4	Q.	0.0500	ND	0.1250	0.1840	0.1840	Q.	0.0500	QN	0.0500
4/25/2018	243	1.2	QN .	0.0500	Ð	0.1250	0.2550	0.2550	2.1000	2.1000	0.3550	0.3550
4/25/2018	124	3.5	Q.	0.0500	Q.	0.1250	0.3300	0.3300	0.1980	0.1980	0.1260	0.1260
4/2//2018	336	2.2	Q.	0.0500	Q.	0.1250	0.5380	0.5380	2.2300	2.2300	0.2050	0.2050
4/29/2018	106	5.5	*	*	*	*	*	*	*	*	*	*
5/1/2018	11.3	9.8	Q !	0.0500	QN	0.1250	0.1050	0.1050	ND	0.0500	QN.	0.0500
3/3/2018	123	9.9	QN !	0.0500	QN	0.1250	0.1230	0.1230	ND	0.0500	R	0.0500
5/2/2018	320	3.5	Q S	0.0500	ND	0.1250	0.2280	0.2280	ND	0.0500	ND	0.0500
5/0/2018	100	2.7	Q !	0.0500	QN	0.1250	0.1160	0.1160	ND	0.0500	ND	0.0500
5/11/2018	120	6.5	QN S	0.0500	QN	0.1250	ND	0.0500	ND	0.0500	QN	0.0500
5/17/2018	11.5	9.1	QN	0.0500	Q.	0.1250	ND	0.0500	ND	0.0500	QX	0.0500
5/13/2018	115	7.9	*	*	*	*	*	*	*	*	*	*
5/13/2018	671	5.6	QN !	0.0500	æ	0.1250	ND	0.0500	ND	0.0500	Q.	0.0500
5/17/2018	159	0.9	QN	0.0500	QN	0.1250	0.1320	0.1320	ND	0.0500	£	0.0500
5/19/2018	121	10.1	QN	0.0500	Ð	0.1250	ND	0.0500	ND	0.0500	S	0.0500
5/21/2018	117	3.9	æ	0.0500	ND DN	0.1250	0.1520	0.1520	0.3580	0.3580	0.8050	0.8050
5/23/2018	26	5.2	*	*	*	*	*	*	*	*	*	*
5/22/2018	149	3.0	QN	0.0500	Ð	0.1250	0.1160	0.1160	ND	0.0500	QX	0.0500
5/2//2018	146	4.9	*	*	*	*	*	*	*	*	*	*
5/29/2018	130	5.2	Q.	0.0500	Ð	0.1250	ND	0.0500	ND	0.0500	0.1290	0.1290
5/31/2018	128	8.8	2 5	0.0500	Q	0.1250	QN	0.0500	ND	0.0500	ND	0.0500
0/2/2018	148	6.7	Q !	0.0500	Ð	0.1250	0.1020	0.1020	ND	0.0500	0.1390	0.1390
6/4/2018	169	4.4	QN	0.0500	QN.	0.1250	0.1170	0.1170	0.1750	0.1750	0.1230	0.1230
6/6/2018	137	6.7	QN	0.0500	Ð.	0.1250	ND	0.0500	ND	0.0500	Ð	0.0500
6/8/2018	121	7.2	Q.	0.0500	Ð.	0.1250	ND	0.0500	ND	0.0500	QN.	0.0500
6/10/2018	190	8.8	2	0.0500	QN.	0.1250	0.1930	0.1930	Ω.	0.0500	QN	0.0500
6/17/2018	126	8.8	Q !	0.0500	Ð	0.1250	0.1120	0.1120	ND	0.0500	Q.	0.0500
6/14/2018	122	6.9	Q,	0.0500	QN	0.1250	0.1490	0.1490	ND	0.0500	QN	0.0500
6/16/2016	114	6.9	, j	*	*	*	*	*	*	*	*	*
6/10/2019	501	8.8	Q (	0.0500	2	0.1250	0.1120	0.1120	0969:0	0969:0	1.8400	1.8400
6/22/2018	151	4.9	2 2	0.0200	QV 4	0.1250	0.1230	0.1230	0.3960	0.3960	0.6200	0.6200
6/24/2018	131	8.8	2	0.0500	2 5	0.1250	0.1360	0.1560	Q E	0.0500	0.1030	0.1030
6/26/2018	123	7.5	Ð	0.0500	9	0.1250	2 2	0.0000	2	0.0000	Q !	0.0500
6/28/2018	143	7.0	Ð	0.0500	9	0.1250	9	0.0500		00500	ON S	0.0500
6/30/2018	137	8.3	Ð	0.0500	8	0.1250	2	00500	2 2	00500	2	0.0200
7/2/2018	140	5.3	ND	0.0500	Ð	0.1250	2	0.0500	2 2	00500	2 5	0.0500
7/4/2018	130	2.8	QN	0.5000	ND ON	1.2500	QN.	0.5000	2	0.5000	10.3000	0.0300
7/6/2018	208	0.7	Q.	0.0500	ND	0.1250	0.3180	0.3180	0.1040	0.1040	0.3430	0 3430
7/8/2018	161	2.8	Q	0.0500	ND ON	0.1250	0.1930	0.1930	Ð	0.0500	Ð	0.0500
7/10/2018	121	4.6	Ð	0.0500	Ð	0.1250	0.3650	0.3650	ND	0.0500	Ð	0.0500
7/12/2018	146	4.3	QN	0.0500	Ð	0.1250	QN	0.0500	ND	0.0500	Q.	0.0500
7/12/2018	138	6.1	2	0.0500	Q.	0.1250	ND	0.0500	Ð.	0.0500	ND	0.0500
7/18/2018	153	5.6	9	0.0500	9	0.1250	0.1080	0.1080	ND	0.0500	QN	0.0500
7/20/2018	163	5.0	2 2	0.5000	8 9	0.1250	0.1850	0.1850	Q.	0.0500	ND QN	0.0500
81000007	921	5.7	2 2	0.0500	ON E	0.1250	0.4950	0.4950	Q.	0.0500	0.1720	0.1720
	2 2 2	,., I	ן תאו	MCO.U	JN	0.1250	0.4890	0.4890	Q.	0.0500	0.1090	0.1090

SAMPLE DATE	AVG.WIND	AVG.WIND		ETHYLENE	1,3 BUT	1,3 BUTADIENE	BEN	BENZENE	VINYL	VINYL CHLORIDE	ETHYLENE	ETHYLENE DICHLORIDE
	(Degrees)	SPEED (mph)	Actual (ppb)	1/2 Reported LOD	Actual (nph)	1/2 Reported LOD	Actual (nach)	1/2 Reported LOD	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD
7/24/2018	145	3.7	QN.	0.0500	(odd)	01050	(ppp)	(bbb)	(qdd)	(qdd)	(qdd)	(qdd)
7/26/2018	143	3.1	Q.	0.0500	G. C.	0.1250	0.1390	0.1390	Q .	0.0500	ND	0.0500
7/28/2018	133	4.0	QN	0.0500	QN ON	0.1250	0.2330	0.2330	ON SE	0.0500	0.1000	0.1000
7/30/2018	156	3.9	ND	0.0500	ND	0.1250	ND	0.0500	2 8	0.0500	0.1050	0.1050
8/1/2018	129	1.1	ND	0.0500	ND	0.1250	0.3900	0.3900	1.2300	1 2300	03580	0.0500
8/3/2018	107	4.1	ND	0.0500	ND	0.1250	0.3420	0.3420	0.7380	0.7380	1 2800	1 2800
8/5/2018	101	6.5	ND	0.0500	ND	0.1250	ND	0.0500	ND	0.0500	ND	0.0500
8/7/2018	122	6.2	ND	0.0500	ND	0.1250	ND	0.0500	ND	0.0500	QN	0.0500
8/9/2018	138	5.6	ND	0.0500	ND	0.1250	ND	0.0500	QN	0.0500	0.1170	0.1170
8/11/2018	149	4.1	*	*	*	*	*	*	*	*	*	*
8/13/2018	134	7.7	ND	0.0500	ND	0.1250	ND	0.0500	ND	0.0500	QN.	0.0500
8/15/2018	142	6.5	ND	0.0500	ND	0.1250	ND	0.0500	QN	0.0500	Q.	0.0500
8/17/2018	135	0.9	ND	0.0500	ND	0.1250	ND	0.0500	ND	0.0500	QN	0.0500
8/19/2018	158	7.4	*	*	*	*	*	*	*	*	*	*
8/21/2018	155	5.4	QN	0.0500	ND	0.1250	ND	0.0500	ND	0.0500	ND	0.0500
8/23/2018	136	3.9	*	*	*	*	*	*	*	*	×	*
0107/27/0	123	5.9	QN	0.0500	ND	0.1250	ND	0.0500	ND	0.0500	ND	0.0500
8/2//2018	124	6.9	QN	0.0500	ND	0.1250	ND	0.0500	ND	0.0500	ND	0.0500
8/21/2018	121	4.3	QN ,	0.0500	ND	0.1250	ND	0.0500	ON	0.0500	0.1120	0.1120
0/2/1/2010	100	4.0		H	*	*	*	*	*	*	*	*
9/2/2018	106	2.1	QN II	0.0500	ND	0.1250	ND	0.0500	0.1700	0.1700	0.3080	0.3080
9/6/2018	99	0.4	ON ON	0.0500	QN II	0.1250	0.1090	0.1090	1.6600	1.6600	1.9400	1.9400
9/8/2018	120	4.8	ON ON	0.0500	ON CAN	0.1250	0.1680	0.1680	0869.0	0869.0	0.6670	0.6670
9/10/2018	40	3.7	2 5	00000	GN GN	0.1250	0.1760	0.1760	0.1070	0.1070	0.1150	0.1150
9/12/2018	09	4.6	2	0.0500	GN CN	0.1250	0.1080	0.1080	1.5300	1.5300	3.5800	3.5800
9/14/2018	41	6.1	GN.	0.0500	S. S.	0.1250	0.1660	0.1600	2.0500	2.0500	3.3800	3.3800
9/16/2018	122	1.9	QX	0.0500	GN CN	0.1250	0.0000	0.1330	2.1800	2.1800	5.1700	5.1700
9/18/2018	187	1.3	QN	0.0500	2	0.1250	0.2300	0.1320	0.54/0	0.5470	0.8670	0.8670
9/20/2018	121	5.9	QN	0.0500	GN GN	0.1250	O.C.O.	0.1320	ON ON	0.0500	0.1420	0.1420
9/22/2018	204	2.9	QN	0.0500	QN	0.1250	0.1510	0.1510	2 2	0.0500	ON ON	0.0500
9/24/2018	115	4.5	ND	0.0500	ND	0.1250	0.1780	0.1780	Q.	0.0500	2 2	0.0500
9/26/2018	132	2.4	ND	0.0500	ND	0.1250	0.1510	0.1510	0.4270	0.4270	0.8060	0800
9/28/2018	62	2.9	ND	0.0500	ND	0.1250	ND	0.0500	0019:1	1.6100	1.9400	1.9400
9/30/2018	65	2.2	QN	0.0500	QN	0.1250	0.2190	0.2190	2.1300	2.1300	2.8200	2.8200
10/2/2018	92	4.7	QN !	0.0500	QN.	0.1250	QN	0.0500	1.2900	1.2900	2.1200	2.1200
10/4/2018	111	8.8	ON S	0.5000	NO.	1.2500	1.0900	1.0900	ND	0.5000	ND	0.0500
10/8/2018	108	7.0	NO NA	0.0500	9 5	0.1250	NO NO	0.0500	ND ND	0.0500	ND	0.0500
10/10/2018	344	3.8	2 2	0.0500	ON AN	0.1250	QN	0.0500	ND	0.0500	Q.	0.0500
10/12/2018	88	5.1	QN.	00500	ON CA	0.120	0.7510	0.7510	0.9960	0966:0	0.9980	0.9980
10/14/2018	123	7.0	Q.	0.0500	QN ON	0.1250	0.4150	0.4150	3.0000	0.0600	17.7000	17.7000
10/16/2018	317	6.3	ON.	0.0500	ND	0.1250	0.2080	0.2080	ON ON	00000	N N	0.0500
10/18/2018	343	4.9	ND	0.5000	ND	0.1250	0.6560	0.6560	1.0100	10100	2 5	0.0500
10/20/2018	345	8.9	ON	0.0500	ND	0.1250	0.3600	0.3600	1.2300	1.2300	- GN	00000
10/22/2018	351	4.8	ND	0.0500	ND	0.1250	0.3050	0.3050	4.7800	4.7800	0.1290	0 1290
10/24/2018	5	3.9	*	*	*	*	*	*	*	*	*	*
10/26/2018	249	1.5	Q.	0.0500	N	0.1250	0.2520	0.2520	0.6970	0.6970	ND	0.0500
10/20/2018	1179	2.8	ON ON	0.0500	Q.	0.1250	0.2960	0.2960	ND	0.0500	ND	0.0500
11/1/2018	324	0.0	ON ON	0.0500	QN 4N	0.1250	QN	0.0500	ND	0.0500	ND	0.0500
AUMMONO	140	0.2	QNI	UNCO'O	ND	0.1250	0.2610	0.2610	1.0300	1.0300	NO	0.0500

SAMPLE DATE	AVG.WIND	AVG.WIND	ЕТН	ETHYLENE	1,3 BU1	1,3 BUTADIENE	BEN	BENZENE	VINYLC	VINYL CHLORIDE	ETHVI PNE	ETHVI ENE DICHI OBIDE
	DIRECTION (Degrees)	SPEED (mph)	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD
01000011	(casedare)		(ndd)	(add)	(add)	(qdd)	(qdd)	(qdd)	(qdd)	(qdd)	(qdd)	(qdd)
11/3/2018	130	6.7	0.3310	0.3310	ND	0.1250	0.1010	0.1010	ND	0.0500	ND	0.0500
8107/2/11	158	4.9	0.3430	0.3430	ND	0.1250	0.1660	0.1660	0.4450	0.4450	0.7320	0.7320
11/7/2018	157	4.8	0.3760	0.3760	ND	0.1250	0.1450	0.1450	QN	0.0500	ON	0.0500
11/9/2018	348	10.2	QN	0.0500	0.2930	0.2930	0.7920	0.7920	1.3200	1.3200	0.3510	0.3510
11/11/2018	24	6.2	ND	0.0500	ND	0.1250	0.4330	0.4330	0.8340	0.8340	0.3180	0.3160
11/13/2018	321	7.6	ND	0.0500	ND	0.1250	0.2450	0.2450	0 1040	01040	0.5180	0.5180
11/15/2018	112	2.9	ON	0.0500	ND	0.1250	03000	03000	0.705.0	0.1040	UND	0.000
11/17/2018	88	4.5	*	*	*	*	*	N.O.C.O.	**	0.000	0.8120	0.8120
11/19/2018	344	7.0	*	*	*	*	*	н		,	*	н
11/21/2018	22	4.8	QN	0.0500	GN	01050	0.4500	0.4500	13400	2 0 000	*	м
11/23/2018	46	0.4	*	*	*	**	**	0.4300	1.3400	1.3400	1.0700	1.0700
11/25/2018	316	3.0	QN	0.050.0	QN.	01050	03000	03000		-	*	*
11/27/2018	88	10	CN.	00500	2	0.1250	0.2030	0.2020	ND	0.0500	ND	0.0500
11/29/2018	145	3.5	2	00500	OOLO	0.000	0.2100	0.2100	QN	0.0500	ND	0.0500
9100/1/01	000	100	9	00000	0.2780	0.2780	0.1770	0.1770	ND	0.0500	0.3070	0.3070
102/12/16	240	7.7	ON.	0.0500	ND	0.1250	0.1930	0.1930	ND	0.0500	0.1400	0.1400
12/2/2018	348	2.8	QN	0.0500	0.2780	0.2780	0.8490	0.8490	0.6290	0.6290	09990	09990
125/2018	46	5.0	ND	0.0500	ND	0.1250	0.3790	0.3790	1.8800	1.8800	5.1400	5.1400
12772018	102	1.9	ND	0.0500	ND	0.1250	0.3240	0.3240	0.1260	0.1260	0.2680	0.2680
12/9/2018	323	6.4	*	*	*	*	*	*	*	*	*	*
12/11/2018	101	3.0	QN	0.0500	ND	0.1250	0.2460	0.2460	0.1050	0.1050	0.3330	03330
12/13/2018	235	6.7	QN	0.0500	ND	0.1250	0.1550	0.1550	ND	0.0500	CN.	0.0500
12/15/2018	284	5.4	*	*	*	*	*	*	*	*	*	*
12/17/2018	129	1.7	ON	0.0500	ND	0.1250	0.5460	0.5460	ND	0.0500	0.2160	0.2160
12/19/2018	15	1.7	ON	0.0500	ND	0.1250	0.2210	0.2210	0.5950	0.5950	3.3900	3 3000
12/21/2018	240	3.0	QN.	0.0500	ND	0.1250	0.2790	0.2790	ND	0.0500	0.2230	0.2230
12/23/2018	323	3.2	ND	0.0500	0.2910	0.2910	0.7380	0.7380	0.4220	0.4220	N N	0.0500
8107/27/1	106	5.9	ND	0.0500	ND	0.1250	0.2070	0.2070	0.1530	0.1530	0.8980	0.8980
12/2/1/2018	128	1.7	QN	0.0500	ND	0.1250	0.2390	0.2390	0.3100	0.3100	1.5000	1.5000
8102/67/21	340	8.6	QN	0.0500	NO NO	0.1250	0.2920	0.2920	0.3400	0.3400	ND	0.0500
1231/2018	467	3.2	0.7080	0.7080	ND	0.1250	0.3200	0.3200	ND	0.0500	ND	0.0500
		-										
			ETH	ETHYLENE	1,3 BUT	1,3 BUTADIENE	- 1	BENZENE	VINYL CI	VINYL CHLORIDE	ETHYLENEI	ETHYLENE DICHLORIDE
			Actual	1/2 Reported LOD	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD
	6		(qdd)	(qdd)	(qdd)	(qdd)	(qdd)	(qdd)	(qdd)	(qdd)	(pdd)	(pbp)
	Year-10-Date Sum		21.2780	31.7780	1.4720	24.8470	47.4090	49.8590	91.2340	96.6340	107.0660	111.3660
	Rolling Year Average		0.1305	0.1950	0.0090	0.1524	0.2909	0.3059	0.5597	0.5928	0.6568	0.6832
	Annual Average		0.1305	0.1950	06000	0.1524	0.2000	0.3050	0.5500	0 5030	07470	-
							O.e. D.	0.0000	0.3327	0.3928	0.6568	0.6832

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TCEQ Air Mor.	TCEQ Air Monitoring Comparison Values (ppb	Values (ppb)	Investigation
Chemical	ST	LT	Limit (ppb)
Vinyl Chloride	27,000	0.47	25
Ethylene Dichloride	94	0.72	29.7
Benzene	180	1.4	28.2
Ethylene	500,000	30	200
1, 3 Butadiene	1,700	6	25

163.0000

Number of theoretical sample periods Number of non operational sample periods

## FORMOSA VOC CANISTER ANALYSIS 4th QUARTER 2018 POINT COMFORT - PC SITE DUPLICATE SAMPLE SCHEDULE

CANAMA P. P. L.	Charles Other		1		DUFLICA	DUPLICATE SAMPLE SCHEDULE						
SAMFLE DAIE	DIRECTION	SPEED (mnh)	Actual	LIHYLENE 1/2 Beneated I On	1,3 BU	1,3 BUTADIENE	- 1	BENZENE	AINIA	VINYL CHLORIDE	ETHYLENE	ETHYLENE DICHLORIDE
	(Degrees)	or the Company	(ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Keported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD	Actual (nnh)	1/2 Reported LOD
0.700												(Cada)
01/09/18	146	5.6	Q S	0.0500	£	0.1250	1.1000	1.1000	0.2570	0.2570	0.3910	0.3910
Relative	Relative Percent Difference (RPD)	1	Q.	ODCO:O		00.1.20		- 1		- 1	- 1	0.6330
		(2.11)		- Chi			8	-8.6957	<i>T</i> -	-7.8505	-47	-47.2656
01/15/18	68	5.9	ND	0.0500	ND	0.1250	0.1030	0.1030	QX	0.0500	01370	0.1370
01/15/18 <sub>d</sub>	68	5.9	*	*	*	*	*	*	*	*	*	*
Relative	Relative Percent Difference (RPD)	(RPD)		*		*		*		*		*
01700110	320											
01/23/18	27.5	4.0	2 2	0.0500	9	0.1250	0.6400	0.6400	0.4360	0.4360	0.3610	0.3610
Policano	C/2	-	Q		ON	-		- !	0.9880	ı	0.3680	0.3680
Kelative	Kelative Percent Difference (KPD)	e (KPD)		ON		Q.	.5	-5.6188	7.	-77.5281	-1	-1.9204
01/27/18	121	4.4	5.4500	5.4500	Q.	0.7500	1.5600	0095	1 6800	1,6800	6 9100	00107
01/27/18 <sub>d</sub>	121	4.4	3.5900	3.5900	QN	0.7500	0.7840	0.7840	0.9780	0.9780	4 5200	0.9100
Relative	Relative Percent Difference (RPD)	(RPD)		41.1504		ND	11	66.2116		52.8217	11	41.8198
02/02/18	146	8.4	QN	0.0500	Q.	0.1250	0.8700	0.8700	0.6390	0,6300	0.6030	0 6030
02/02/18 <sub>d</sub>	146		QN	0.0500	QN		1.2200	1 1	ND	0.0500	ND	0.0500
Кевапус	Kelative Percent Difference (KPD)	(KPD)		ND I		QN	-33	-33.4928	170	170.9724	169	169.3721
02/10/18	218	3.8	QN	0.0500	ND	0.1250	2.0700	2.0700	0.7500	0.7500	0.2350	0.2350
02/10/18 <sub>d</sub>	218	3.8	QN		ND	П	ΙI	1.4800		0.7450	0.1480	0.1480
Kelative	Relative Percent Difference (RPD)	(KPD)		QN		QN ON	33	33.2394	0.	6899.0	45	45.4308
02/14/18	206	3.9	ND	0.0500	QN	0.1250	1.6800	1.6800	1.4900	1.4900	0.5790	0.5790
02/14/18 <sub>d</sub>	206		*	*	*	*	*	*	*	*	*	*
Relative	Relative Percent Difference (RPD)	(RPD)		*		*		*		*		*
02/24/18	141	8.8	CS	00500	S	0.1750	Ę	00300	Ę,	0.0550	!	
02/24/18 <sub>d</sub>	141	8.8	QN.	0.0500	Ð	0.1250	0.9610	0.9610	1.5000	0.0300	04750	0.0500
Relative	Relative Percent Difference (RPD)	(RPD)		ND		ND	1 1	-180.2176	1 1	-187.0968	1	-161.9048
0.770,000												
03/04/18	105	8.5	* *	*   *	*   *	* *	* *	* ,	* 3	*	*	*
Relative	Relative Percent Difference (RPD)	1 1		*		*		· *	+	*	*	*
03/10/16	100		<u> </u>									
03/10/18 <sub>d</sub>	155	6.7	A	***************************************	a *	0.1250 *	0.1790	0.1790	QN*	0.0500	Q *	0.0500
Relative	Relative Percent Difference (RPD)	(RPD)		*		*		*		*		*
03/16/18	152	8.9	QN	0.0500	Q.	0.1250	0.2110	02110	E	0.0500	S	00500
03/16/18 <sub>d</sub>	152	6.8	QN	0.0500	QN	0.1250	0.1620	0.1620	Ð	0.0500	QN ON	0.0500
Relative	Relative Percent Difference (RPD)	(RPD)		ND		QN	26	26.2735		QN		ND
03/22/18	102	7.8	QN.	0.0500	QN	0.1250	0.3950	0.3950	E	0.0500	S	00500
03/22/18 <sub>d</sub>	102	H	QN	0.0500	ND QN	0.1250	0.3660	0.3660	R	0.0500	2	0.0500
Relative	Relative Percent Difference (RPD)	(RPD)		ND	2	ND	7.	7.6216		ND		ND
04/03/18	140	7.3	N N	0.0500	GZ	01250	0.1130	01130	S	00500	dž.	00300
04/03/18 <sub>d</sub>	140	7.3	ND	0.0500	Q.	0.1250	0.1650	0.1650	S	0.0500	Q S	0.0300
Relative	Relative Percent Difference (RPD)	(RPD)		ND		ND	1 1	-37.4101		NO NO	П	ND
04/09/18	33	5.1	0085 0	0.850	9	02010		00200				
04/09/18,	32	5.1	**	**	*	0.1230 *	dN *	0.0200	4.9200	4.9200	2.4400	2.4400
				H							;	+

## FORMOSA VOC CANISTER ANALYSIS 4th QUARTER 2018 POINT COMFORT - PC SITE DUPLICATE SAMPLE SCHEDULE

SAMPLEDATE	F	Evil.	ETHYLENE						The second secon		
	DIRECTION SPEED (mph)	Actual	1/2 Dancated I OD	n l	BUTADIENE	-	BENZENE	VINYL	VINYL CHLORIDE	ETHYLENE	ETHYLENE DICHLORIDE
Œ	(Degrees)	(qdd)	(ppb)	(ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD
Relative Percen	Relative Percent Difference (RPD)		*		*		*		*	(Odd)	(add) *
04/17/18	144 0.7	G/A	00020	1							
		QN QN	0.5000	ON CN	0.1250	0.1650	0.1650	Q.	0.0500	ND	0.0500
Relative Percen	fference (RPD)		ND		ND 021.20			QN	0.0500	QN	
	1 1					3.	00.12.00		ON		ND
04/21/18	108 6.4	QN	0.0500	QN	0.1250	0.1840	0.1840	QN	0.0500	QN	0.0500
Deleting Benezia	Politica Description	QN	0.0500			0.1880	0.1880	ND	0.0500	QN	0.0500
Neighte Feiter	r Dinerence (NFD)		ND		QN	47	2.1505		ND		ND
04/27/18	336 2.2	QN.	00800	5	0201.0	00000					
	336 2.2	QN.	0.0500	2 2	0.1250	0.5380	0.5380	2.2300	2.2300	0.2050	0.2050
Relative Percen	Relative Percent Difference (RPD)		NO.		ON ON		.6 4748		- 1	0.1990	0.1990
							01/17	7-	-23.3003	2.5	2.9703
	125 9.9	ND	0.0500	ND	0.1250	0.1230	0.1230	CN.	00500	9	00000
05/03/18 <sub>d</sub>	- 1	*	*	*	*	*	*	*	*	WD *	0.0000
Relative Percen	Relative Percent Difference (RPD)		*		*		*		*		
01/11/30											
<u> </u>	122 9.1	2 2	0.0500	Q I	0.1250	ND	0.0500	QN	0.0500	ND	0.0500
Relative Percent	Merence (RPD)	a.	0.0500		1		1		0.0500	ND	0.0500
	Completence (NLD)		ND ON		ND		ND		ND	2	ND
	125 5.6	ND	0.0500	QN.	01250	S	00500	9	0.0000		
05/15/18 <sub>d</sub>	125 5.6	ND	0.0500	ND	0.1250	0.1410	0.1410	ON ON	0.0500	2 2	0.0500
Relative Percen	Relative Percent Difference (RPD)		ND		ND		-95.2880		QN		ONCO:O
05/31/18	0.0	div.	00000					П	П		
<u> </u>	28 000	2 2	0.0000	ON ON	0.1250	Q	0.0500	QN	0.0500	ND	0.0500
Relative Percent	fference (RPD)		ND ON	1	0C71.0		0.0500			ND	
							NO.		ND		ND
	121 7.2	QN	0.0500	ND	0.1250	ND	0.050.0	CN	0.050.0	dy.	00000
06/08/18 <sub>d</sub>	- 1	QN	0.0500	ND	0.1250	0.1370	0.1370	ND	0.0500	Q.	2 0000
Relative Percent	Relative Percent Difference (RPD)		ND		ND	-93	-93.0481		QN		ND
06/14/18	-	div	00500								
<u> </u>	122 69	G. S.	0.0200	N S	0.1250	0.1490	0.1490	ND	0.0500	ND	0.0500
Relative Percent	fference (RPD)		ONCO.O.		0.120	- 1	- 1			ND	0.0500
						7-	-22.0896		QN	4	ND
	105 5.3	ND	0.0500	ND	0.1250	0.1230	0.1230	03960	0.3060	00000	0,000
06/20/18 <sub>d</sub>		*	*	*	*	*	*	**	**	0.0200	0.6200
Relative Percent	Relative Percent Difference (RPD)										
1 81/9//90	7.5	9	00000	4.5							
	123 7.5	G. G.	0.0000	ON ON	0.1250	ON SE	0.0500	QN	0.0500	ND	0.0500
Relative Percent	fference (RPD)		ND		ND ON		0.1000 ND				0.1000
		П	П				ND.		ND	2	ND
	111 4.8	QN	0.5000	ND	1.2500	1.0900	1.0900	ND	0.5000	ND	0.0500
10/04/18 <sub>d</sub>	0.0				1.2500		0.1110	ND	0.5000	Q.	9.4900
Keiative rercent	Relative Percent Difference (RPD)		QN		ND	163	163.0308		ND	QN	П
	344 3.8	ND	0.0500	ND	0.1250	0.7510	0.7510	09660	09660	0.0080	U860 U
10/10/18 <sub>d</sub> 3	C 1					0.8850	0.8850	0.9630	0.9630	0.9330	0.9330
Keiative Percent	Relative Percent Difference (RPD)		QN		ND	-16	-16.3814		3.3691	6.7323	ы
10/16/18 3	317 6.3	ND	0.0500	QN	01250	08000	USUCU	NA.	Oraco o	-	
			200	ATT.	0.1200	0.2000	0.2000	N	0.0500	ND	0.0500

## FORMOSA VOC CANISTER ANALYSIS 4th QUARTER 2018 POINT COMFORT - PC SITE DUPLICATE SAMPLE SCHEDULE

SAN PARTY												
	AVG.WIND	AVG.WIND		ETHYLENE	1,3 BUT	1,3 BUTADIENE	BEN	BENZENE	VINYL	VINYL CHLORIDE	ETHYLENE	ETHYLENE DICHLORIDE
	(Degrees)	SPEED (mpn)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD	Actual (nph)	1/2 Reported LOD	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD
10/16/18 <sub>d</sub>	317	6.3	QN	0.5000	ON	0.1250	0.2710	0.2710	ND	0.0500	(gdd)	(qdd)
Relat	Relative Percent Difference (RPD)	(RPD)		ND		ND	-20	26.3048		N N		ON ON
91/00/01	351	40	N. C.	00000								
10/22/18	351	4.0	WD *	0.0500	ON *	0.1250	0.3050	0.3050	4.7800	4.7800	0.1290	0.1290
Relat	Relative Percent Difference (RPD)								*	*	*	*
						Spirit Spirit	10.00				1	
10/28/18	179		ND	0.0500	QN	0.1250	09600	09000	QN.	00000	dia.	00000
10/28/18 <sub>d</sub>	8 <sub>4</sub> 179	2.8	*	*	*	*	*	**	*	**	NO.	0.0500
Relat	ive Percent Difference		*		W	The state of the s			100		4.7	1000
11/03/18	136	6.7	0.3310	0.3310	ND	0.1250	0.1010	0.1010	ND	0.0500	QN	0.0500
11/03/18 <sub>d</sub>	136		0.3360	0.3360	0.4800	0.4800	ON	0.0500	QN	0.0500	QN	0.0500
Kelar	Relative Percent Difference (RPD)	(KPD)		-1.4993	-117	-117.3554	1.9	67.5497		ND		ND
11/11/18	24	67	div.	00000	4.							
11/11/18	47	7.0	ND *	0.0500	QN	0.1250	0.4330	0.4330	0.8340	0.8340	0.3180	0.3180
Polod	Donney Difference					*	*	*	*	*	*	*
Veial	Neiguve rereent Difference (RFD)	(KPD)		The same of the sa			5			( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )	7.1	1.35
OHENNA	00	-										
11/1/118	88	4.5	*	*	*	*	*	*	*	*	*	*
11/1/18 <sub>d</sub>	88	- 1	*	*	*	*	*	*	*	*	*	*
Relat	Relative Percent Difference (RPD)	(RPD)					2.4		150	HCAT I		
01150011	17	, 0										
11/23/18	40	0.4	N 1	*	*	*	*	*	*	*	*	*
PQ1/C7/11	40	- 1	*	*	*	*	*	*	*	*	*	*
Kelat	Relative Percent Difference (RPD)	(RPD)			定数・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・	186	101		1.00		21.2	
91/00/11	116	2.0	and a	00000								
11/20/18.	145	3.7	ON ON	0.0000	0.2780	0.2780	0.1770	0.1770	ND	0.0500	0.3070	0.3070
Port	Chi di la		UND	OUCU.U		0.2940		0.2170	ND	0.0500	0.3340	0.3340
Relat	ve rereent Dinerence	(Kru)		ON	-5.2	-5.5944	-20	20.3046		ND	-8.4243	243
12/07/18	102	1.9	CN.	00000	ND	03010	0,2240	03000	0,000			
12/07/18 <sub>d</sub>	102	6.1	ND ND	0.0500	ND	0.1250	0.2100	0.2540	0.1200	0.1260	0.2680	0.2680
Relati	Relative Percent Difference (RPD)	(RPD)		ND ON		CN CN		42 6066	- 1	125 7142	- 10	
										China	C1CC:C0-	515
12/13/18	235	6.7	ND	0.0500	ND	0.1250	0.1550	0.1550	ND	0.0500	QN.	0.0500
12/13/18 <sub>d</sub>	235		ON		ND	0.1250	0.1760	0.1760	ND	0.0500	N N	0.0500
Relat	Relative Percent Difference (RPD)	(RPD)		ND	Z	ND		-12.6888		ND	QN	
OH PORCE	200											
81/2771	901	5.9	ND	0.0500	N	0.1250	0.2070	0.2070	0.1530	0.1530	0.8980	0.8980
P01/C7/71	100	- 1		*	*	*	*	*	*	*	*	*
Kelat	Relative Percent Difference (RPD)	(RPD)			400		This is	CASSON CONTRACTOR	100	ALC: NO	416	
on total	2001											
12/31/18	254	3.2	0.7080	0.7080	ND	0.1250	0.3200	0.3200	ON	0.0500	ND	0.0500
1431/16d	467	- 1		×	*	*	*	*	*	*	*	*
Kelat	Relative Percent Difference (RPD)	(KPD)		Carlos of the carlos	27/36		11.4	The state of the s		200	STATE OF THE STATE	

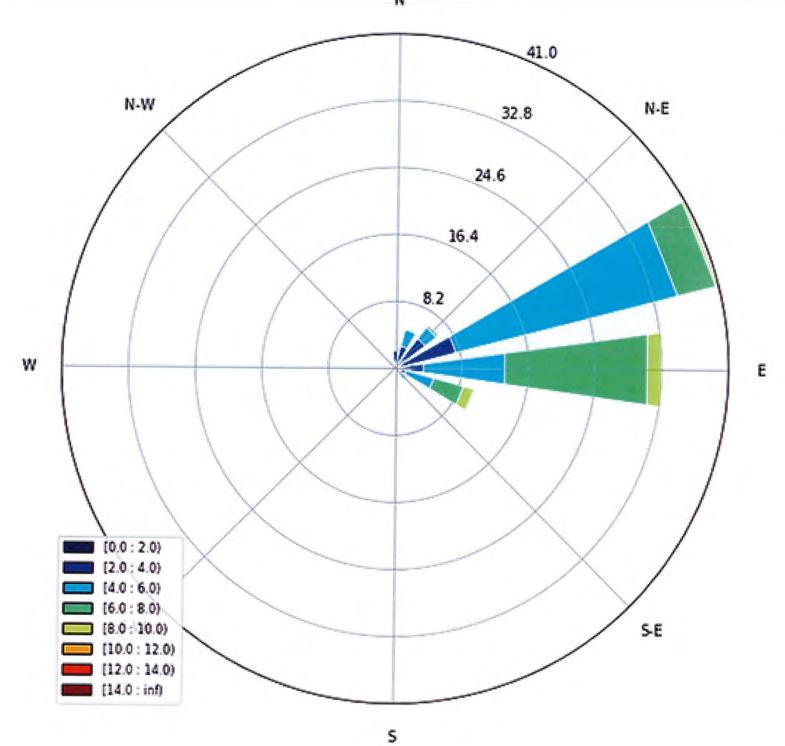
d - Duplicate sample taken in addition to the routine sample (See Calculation Methodology for information on inclusion of duplicate sample results.)

<sup>\* -</sup> non operational, data from the North site was used for Wind Direction and Wind Speed, if available

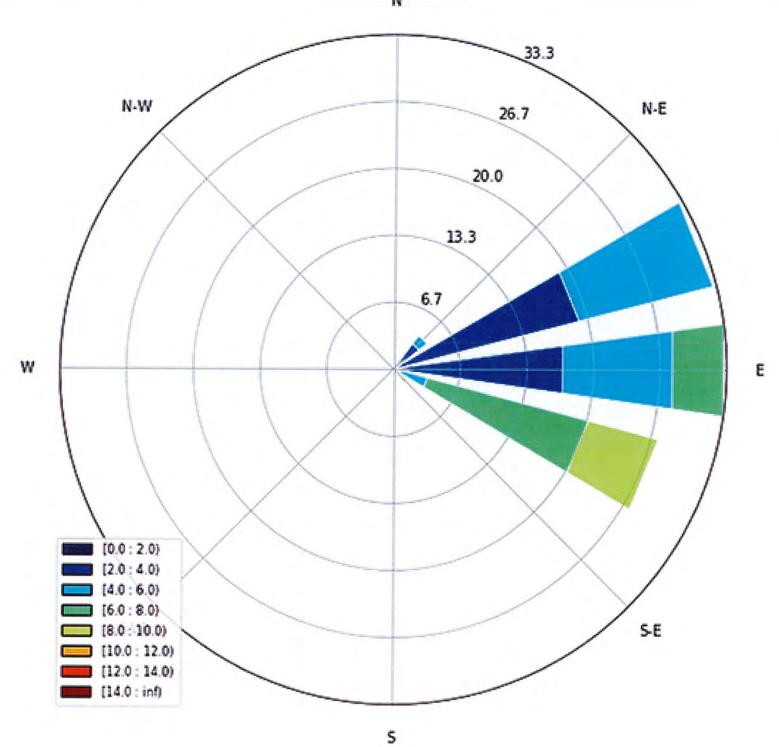
## Summary of Non-operational Periods 4th QUARTER 2018 Point Comfort SUMMA Canister System

SUMMA Site	Date (s)	Description of Problem	Corrective Action
City Hall & Formosa Training Complex	10/6/18	Samples did not run due unknown reasons.	AECOM was unable to verify the cause. Next run was successful.
PC	10/24/18	Voided sample due to low pressure.	Adjusted flow controller to decrease amount sampled.
	10/26/18	Sample leaked below 25" prior to run.	
City Hall, Formosa Training Complex, & Park	11/1/18	No SUMMA cans available.	More cans are in the process of being ordered.
PC, City Hall & Park	11/17/18	Sample did not run due to connectivity issues	Cycled nower sumply Connectivity was restored
PC	11/23/18	No SUMMA cans available.	More cans are in the process of being ordered
Formosa Training Complex	12/7/18	Voided sample due to low pressure.	Adjusted flow controller to decrease amount sampled
PC	12/9/18	Voided sample due to low pressure.	Adjusted flow controller to decrease amount campled
Formosa Training Complex	12/15/18	Sample leaked below 25" prior to run.	The same of the sa
City Hall, Formosa Training Complex, & Park	12/25/18	No SUMMA cans available.	More cans are in the process of being ordered.

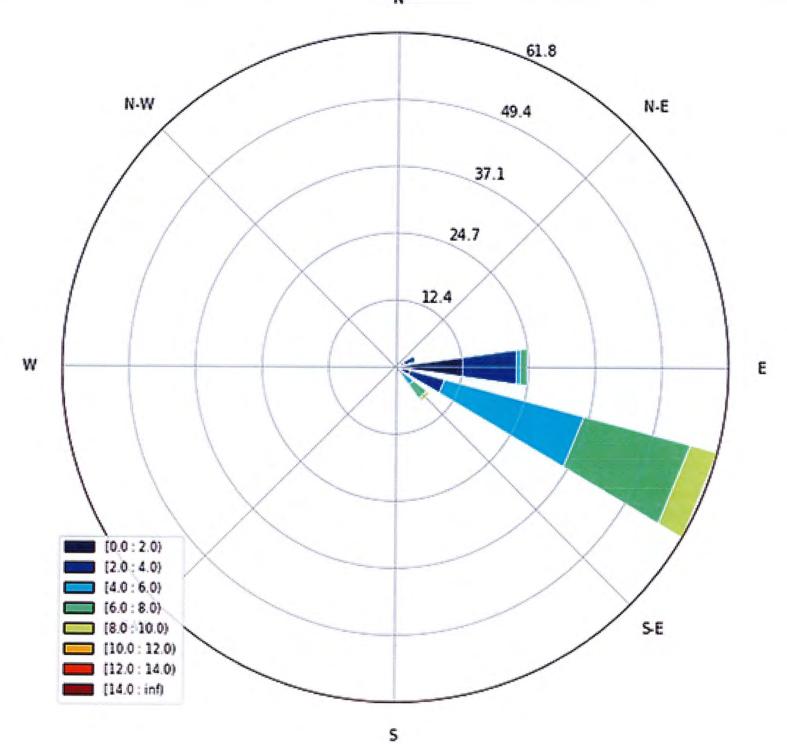
FPC: Oct 1 2018



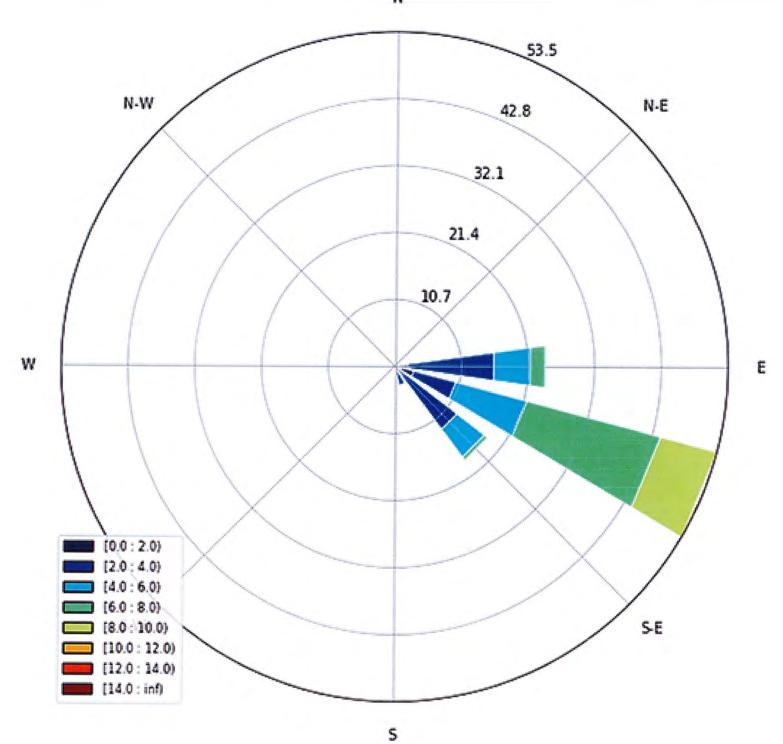
FPC: Oct 2 2018



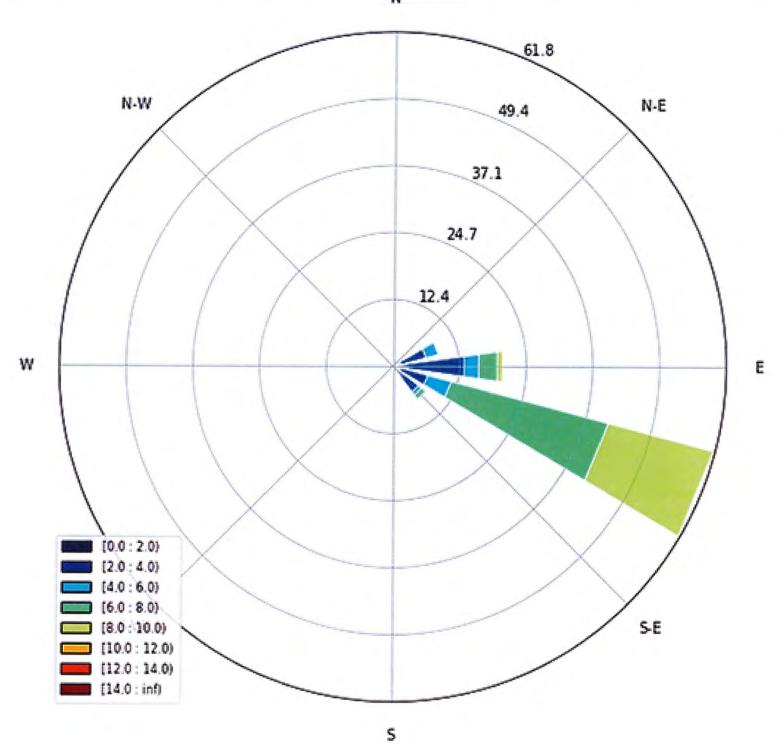
FPC: Oct 3 2018



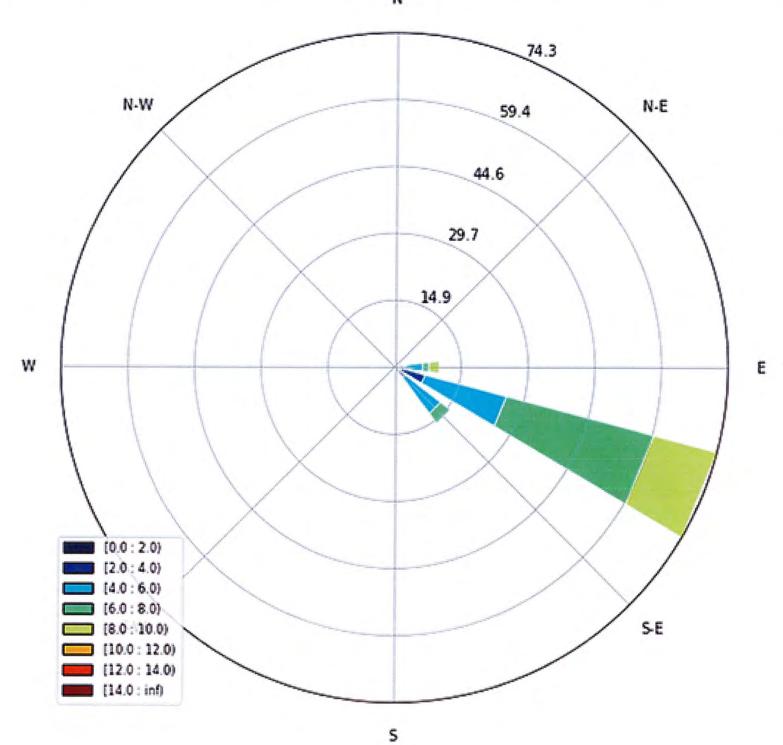
FPC: Oct 4 2018



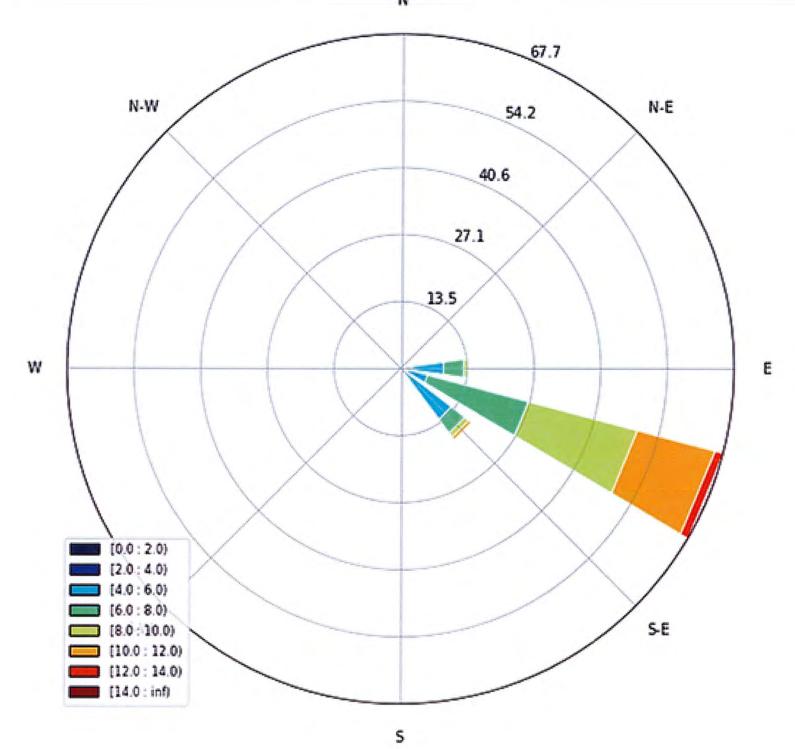
FPC: Oct 5 2018



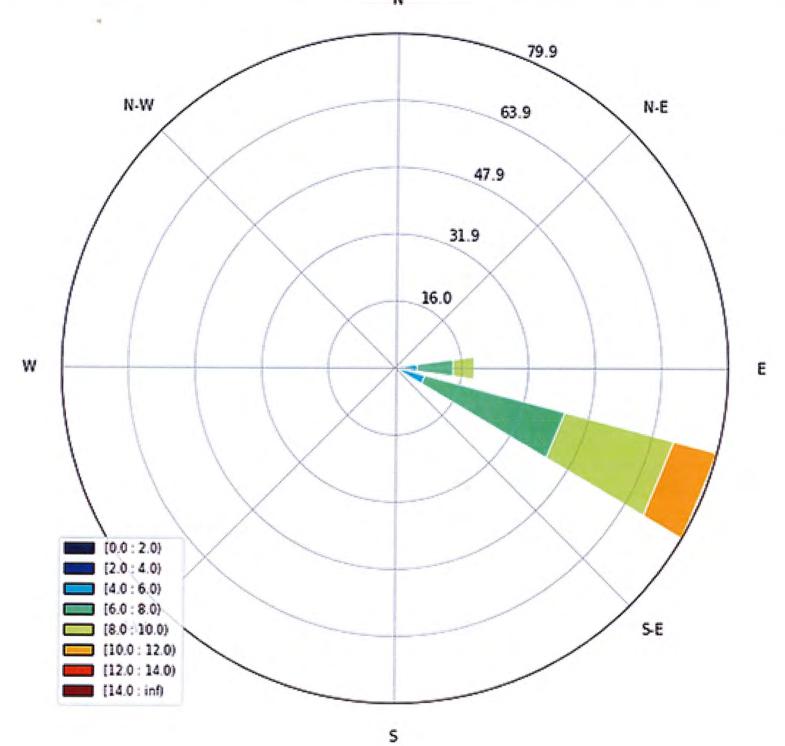
FPC: Oct 6 2018



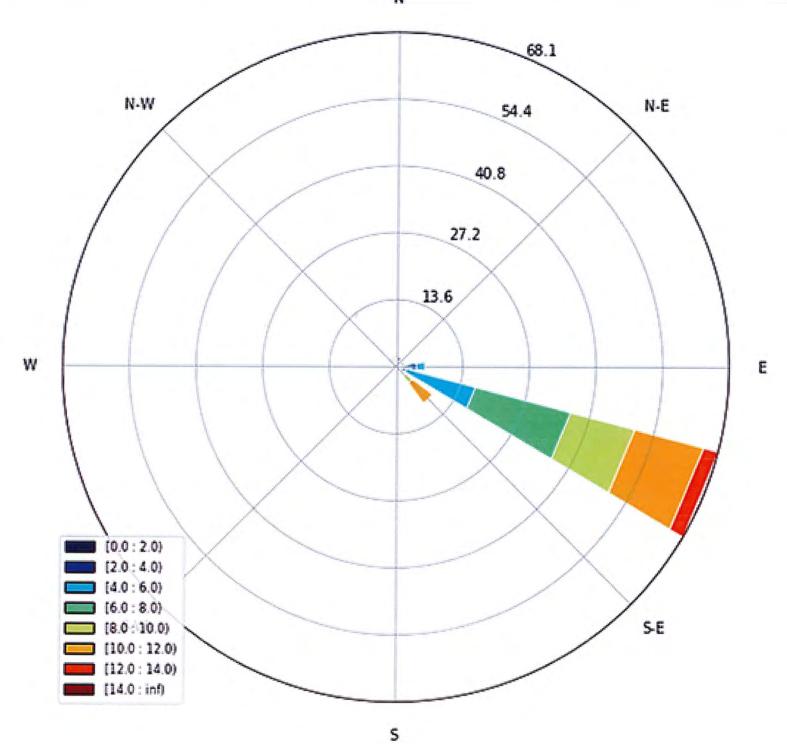
FPC: Oct 7 2018



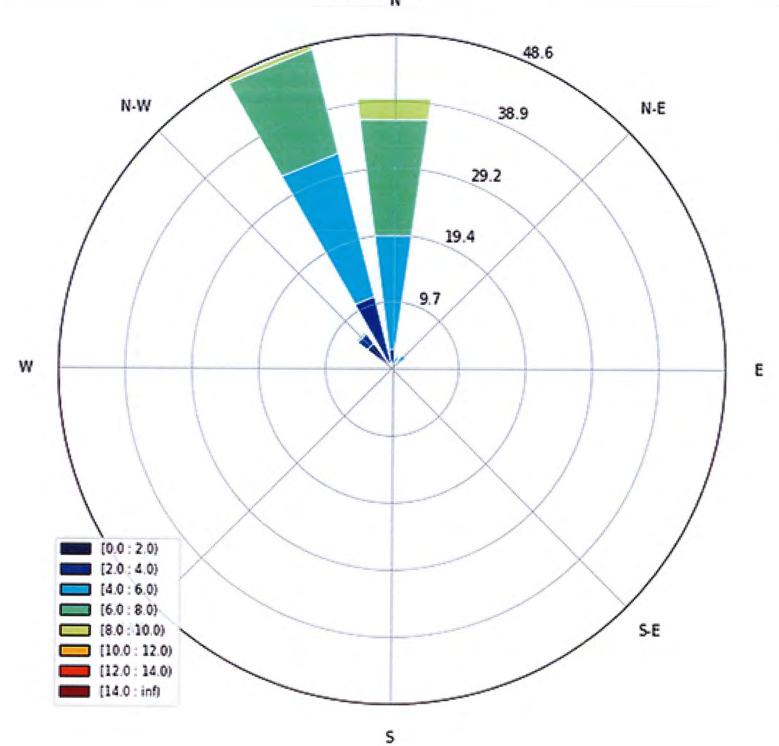
FPC: Oct 8 2018



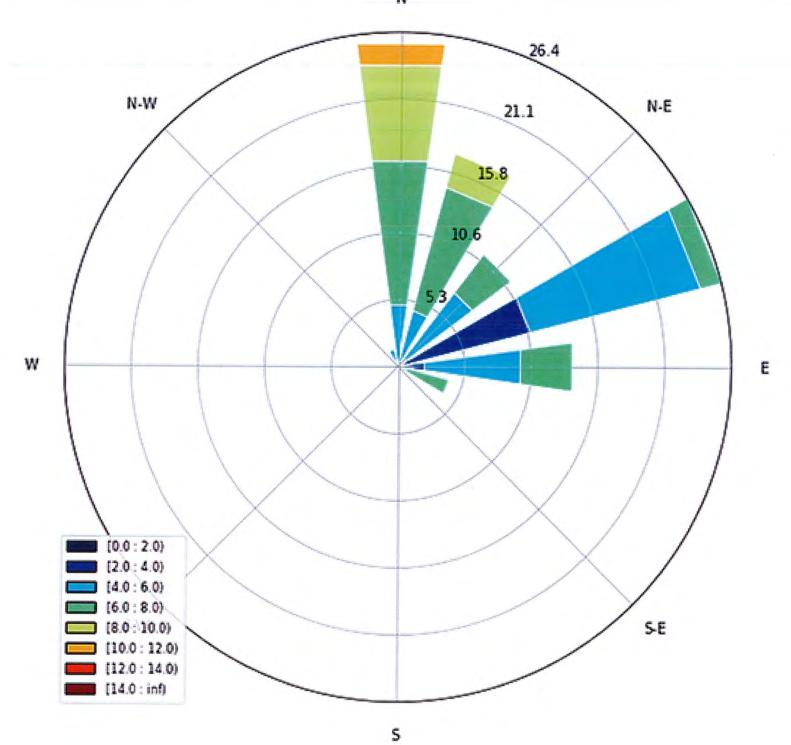
FPC: Oct 9 2018



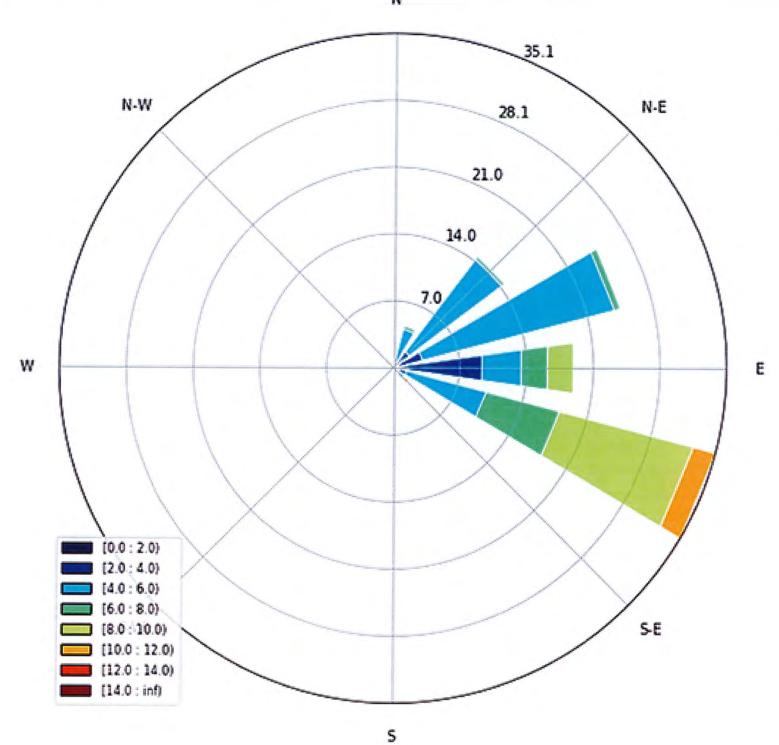
FPC: Oct 10 2018



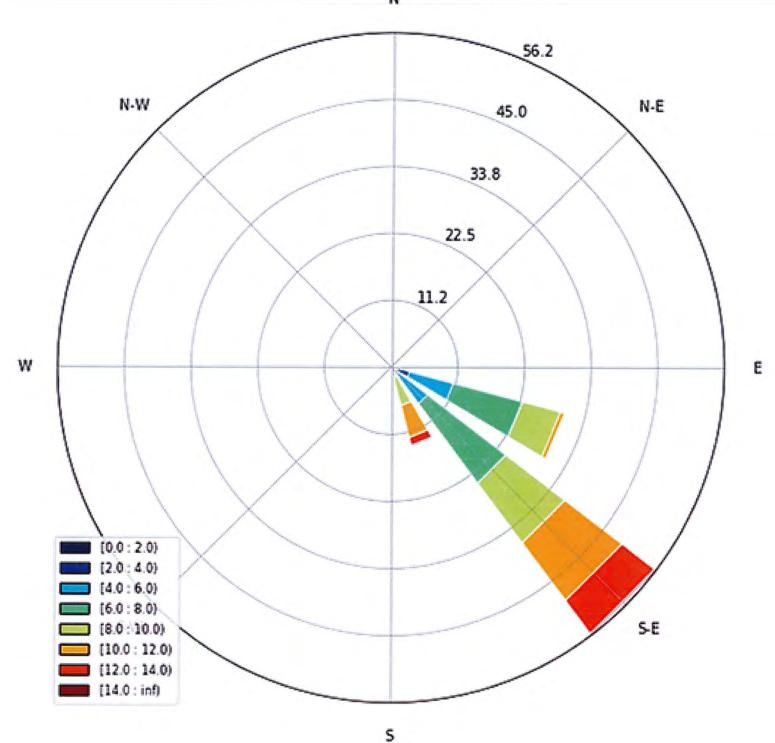
FPC: Oct 11 2018



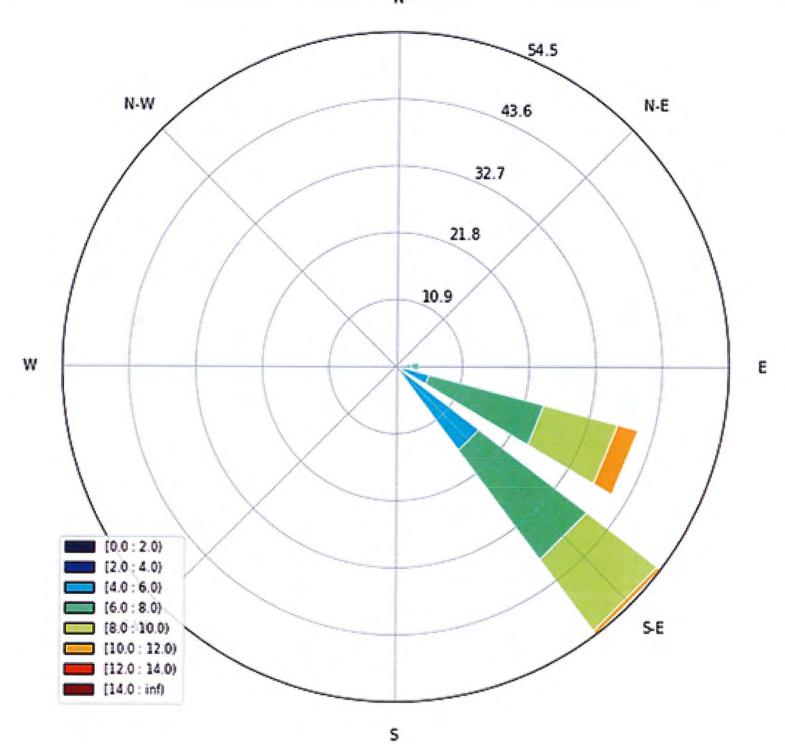
FPC: Oct 12 2018



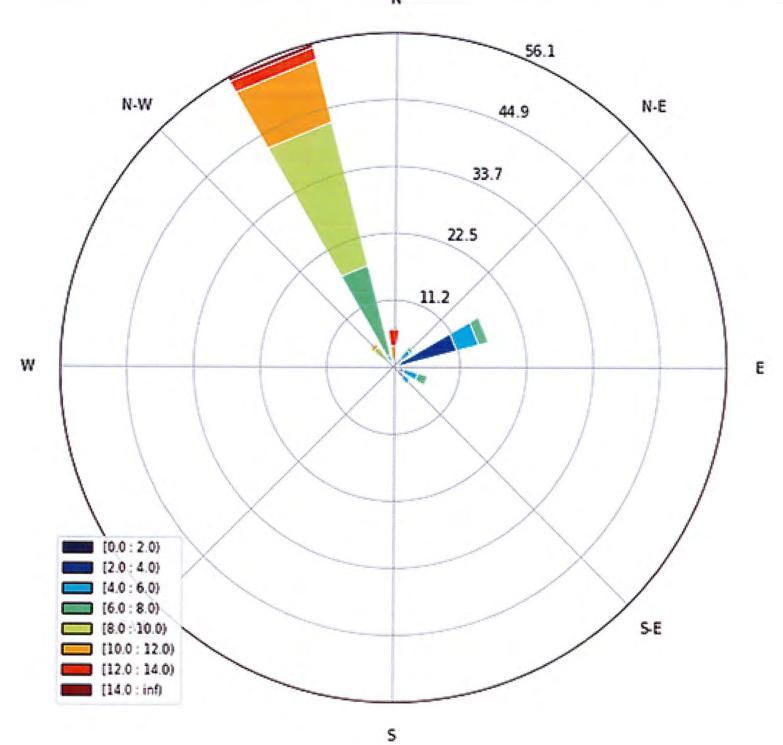
FPC: Oct 13 2018



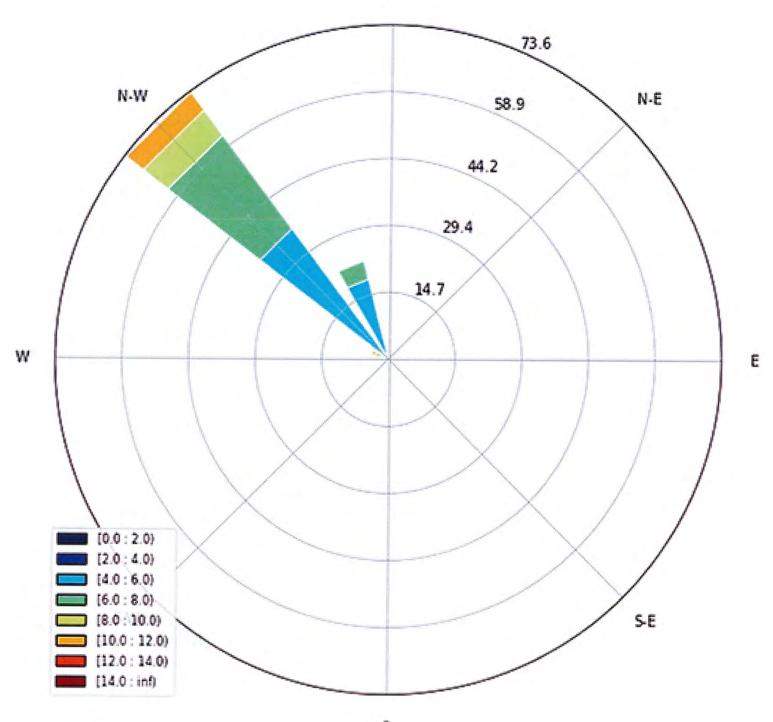
FPC: Oct 14 2018



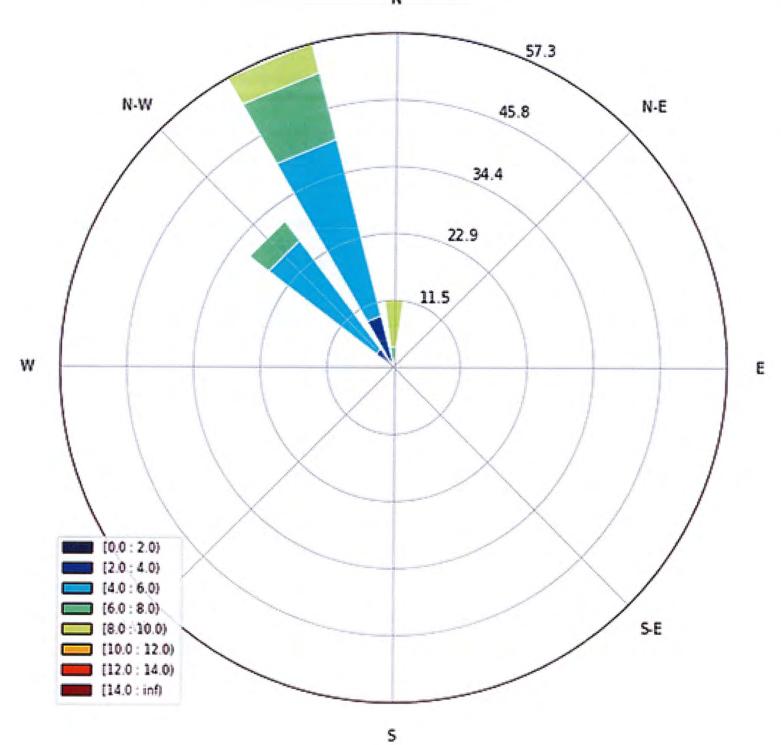
FPC: Oct 15 2018



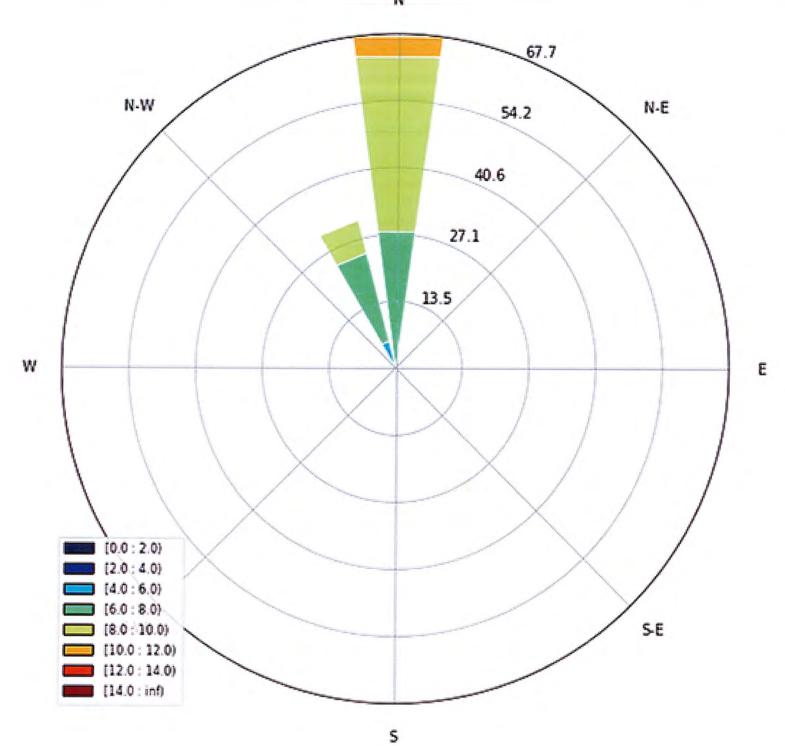
FPC: Oct 16 2018



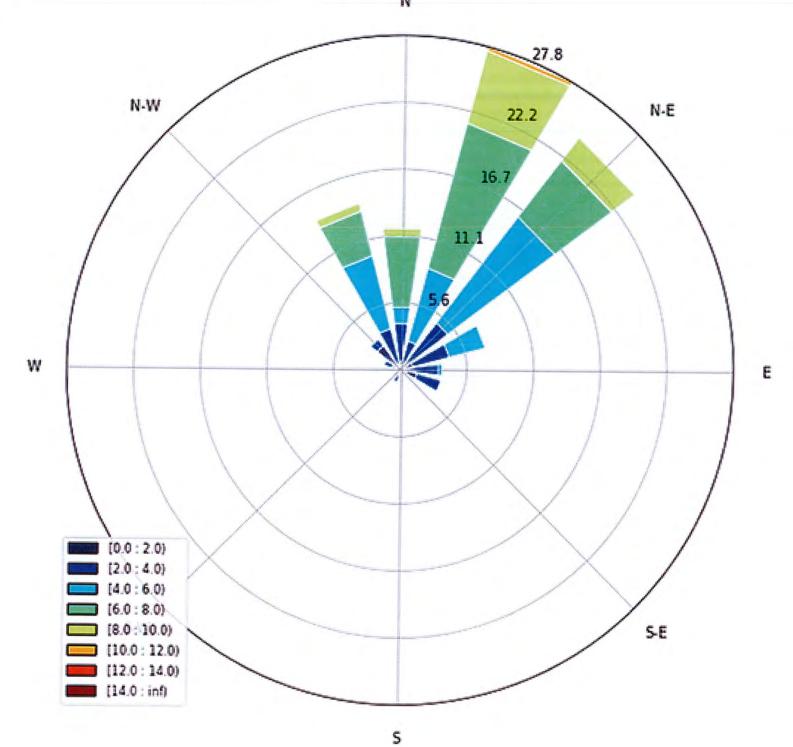
FPC: Oct 17 2018



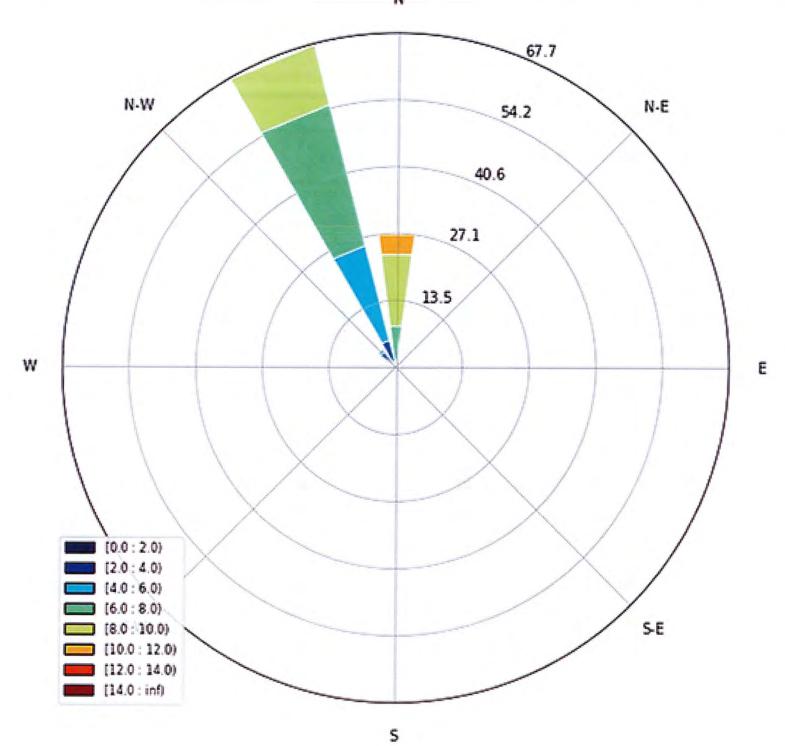
FPC: Oct 18 2018



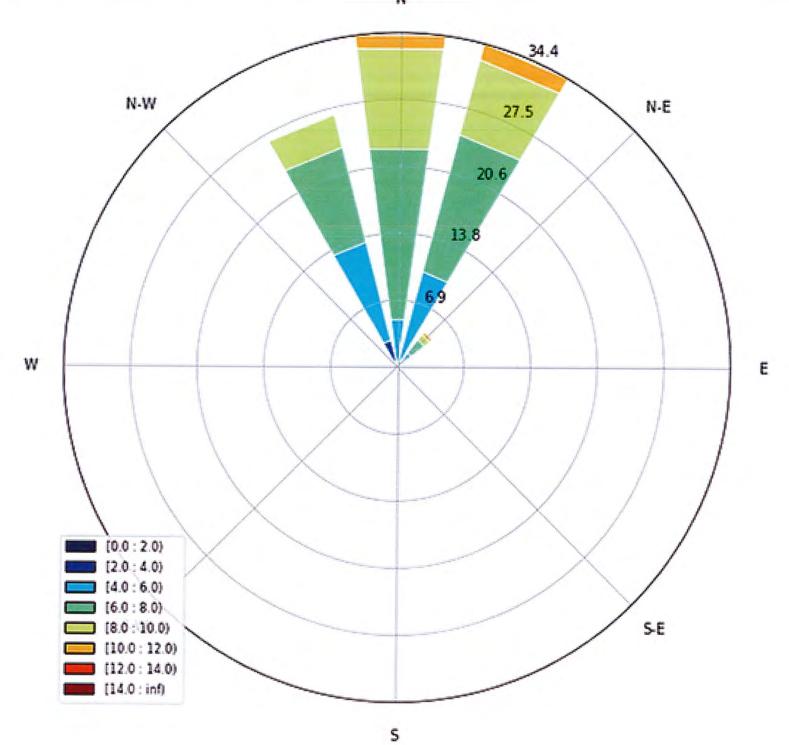
FPC: Oct 19 2018

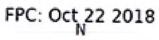


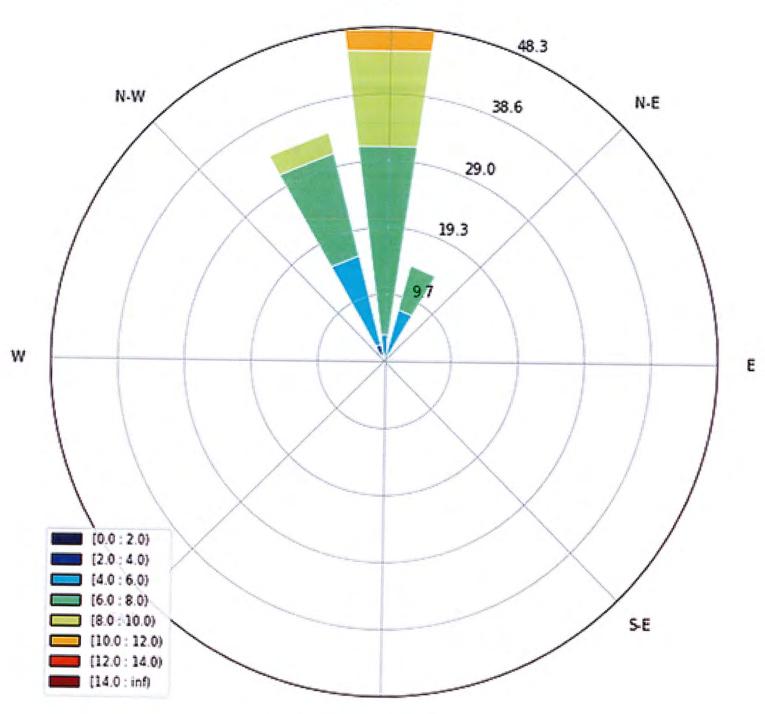
FPC: Oct 20 2018

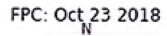


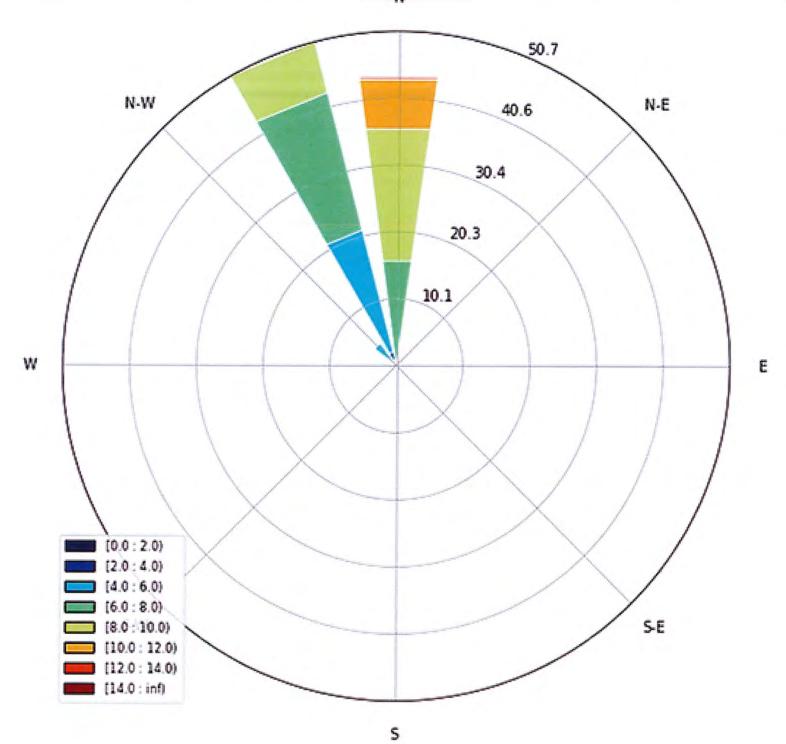
FPC: Oct 21 2018



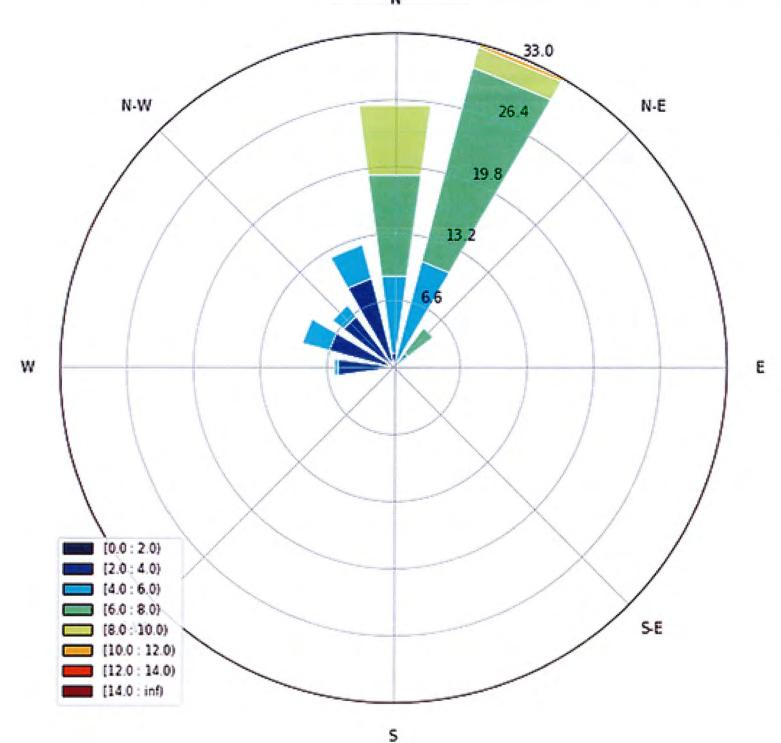




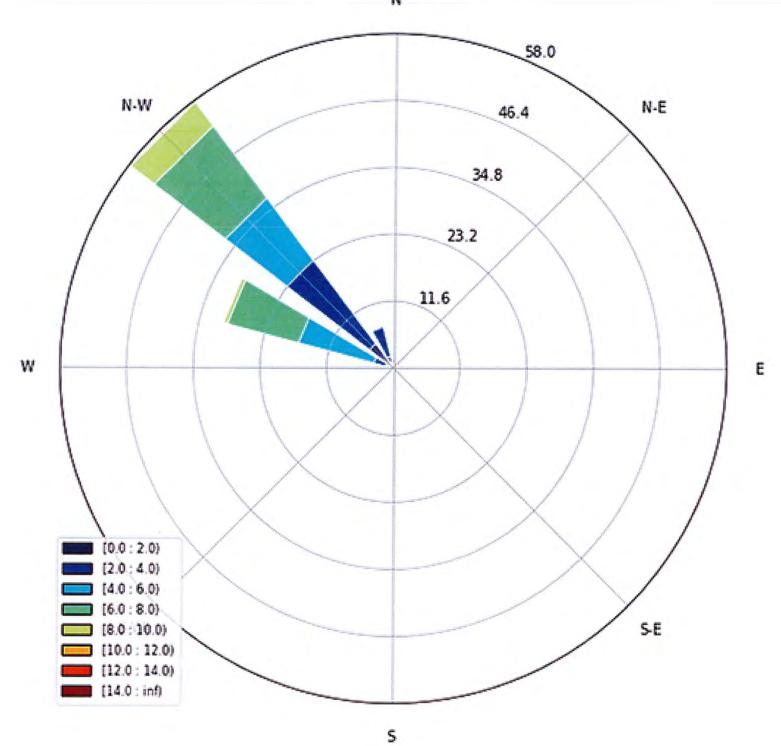




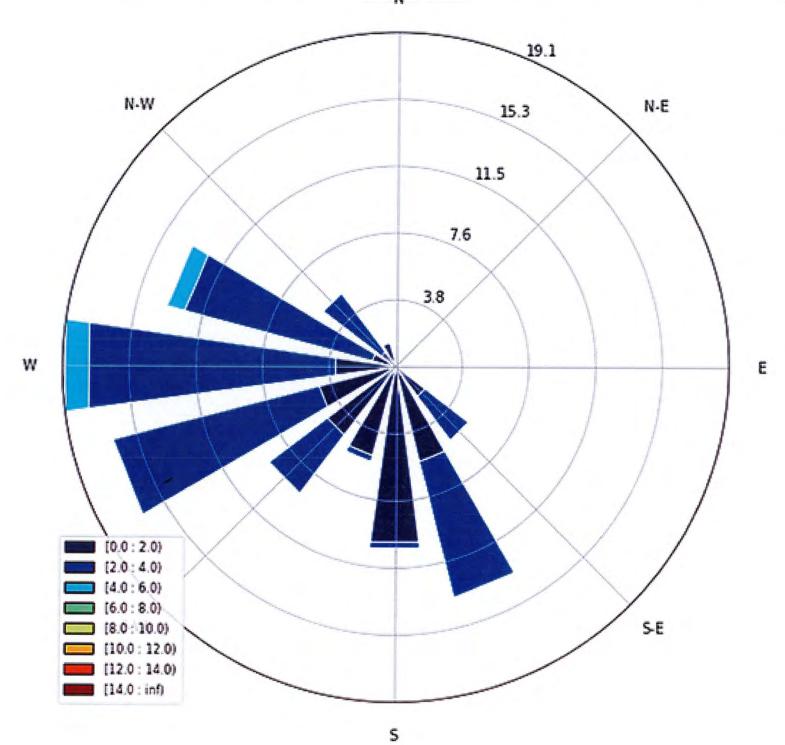
FPC: Oct 24 2018



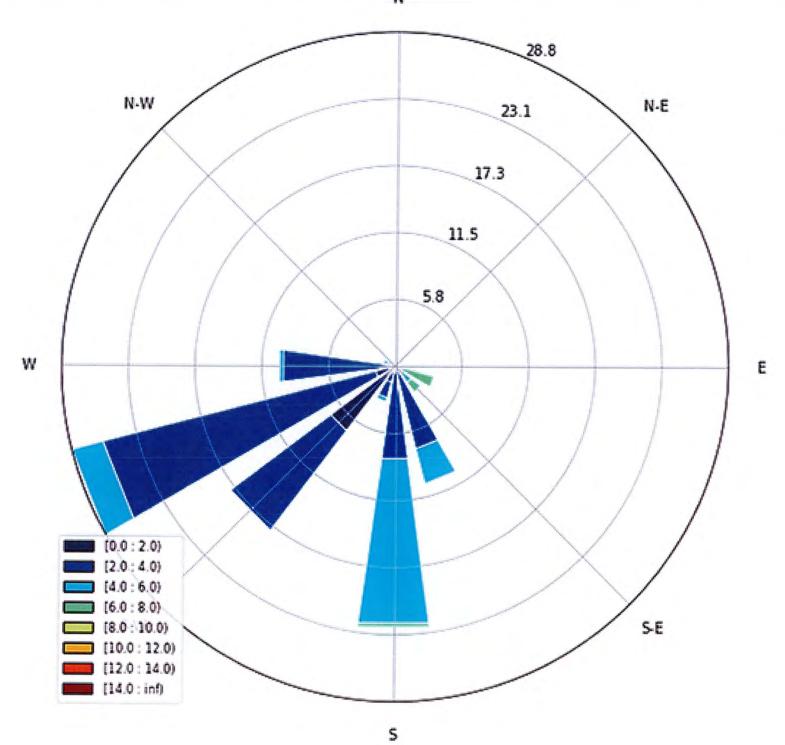
FPC: Oct 25 2018



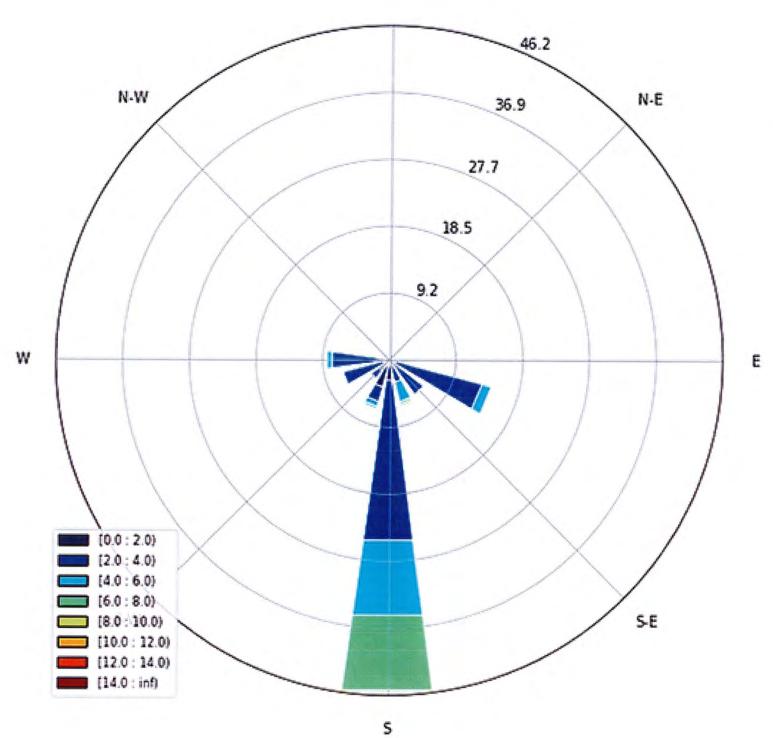
FPC: Oct 26 2018



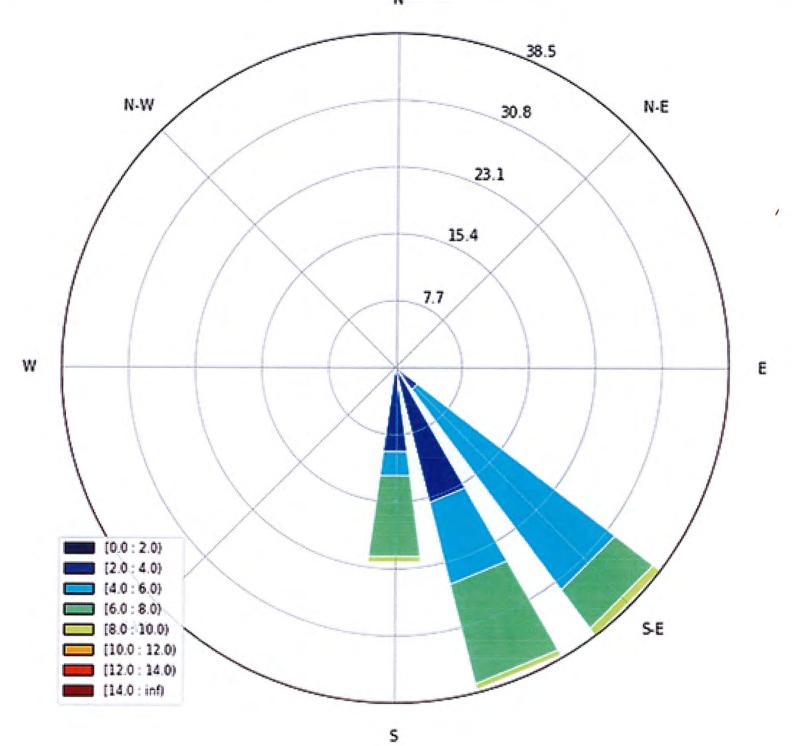
FPC: Oct 27 2018



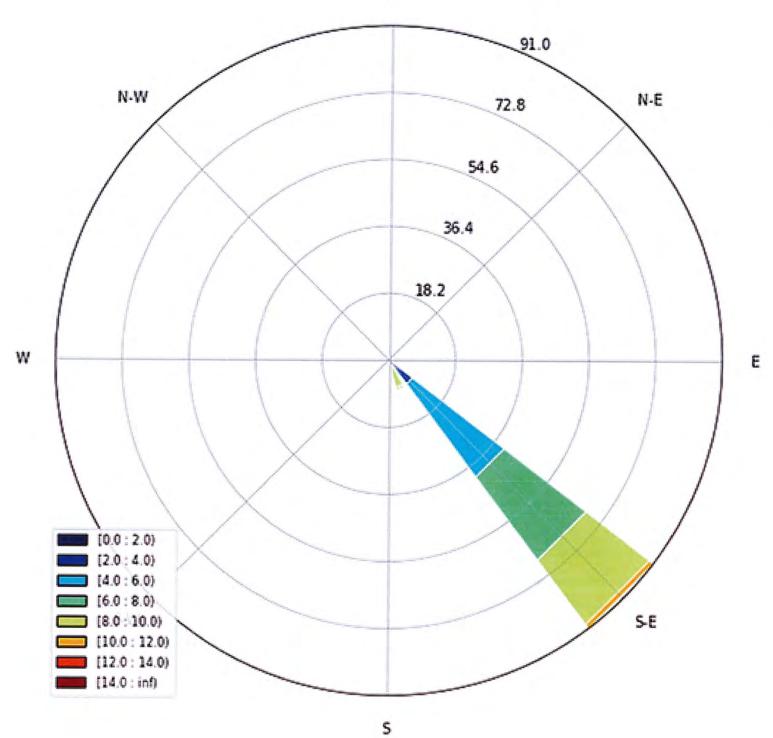
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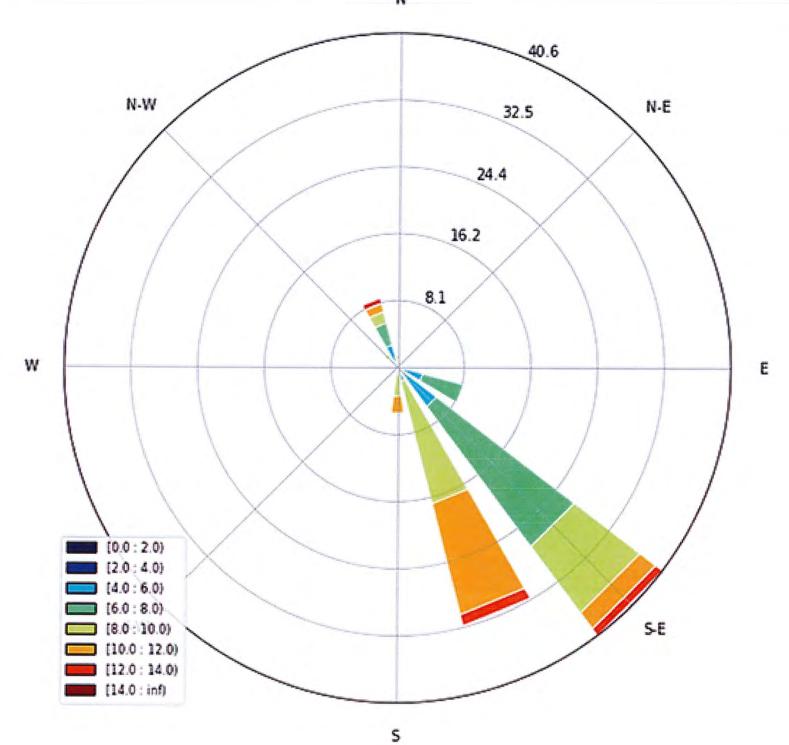
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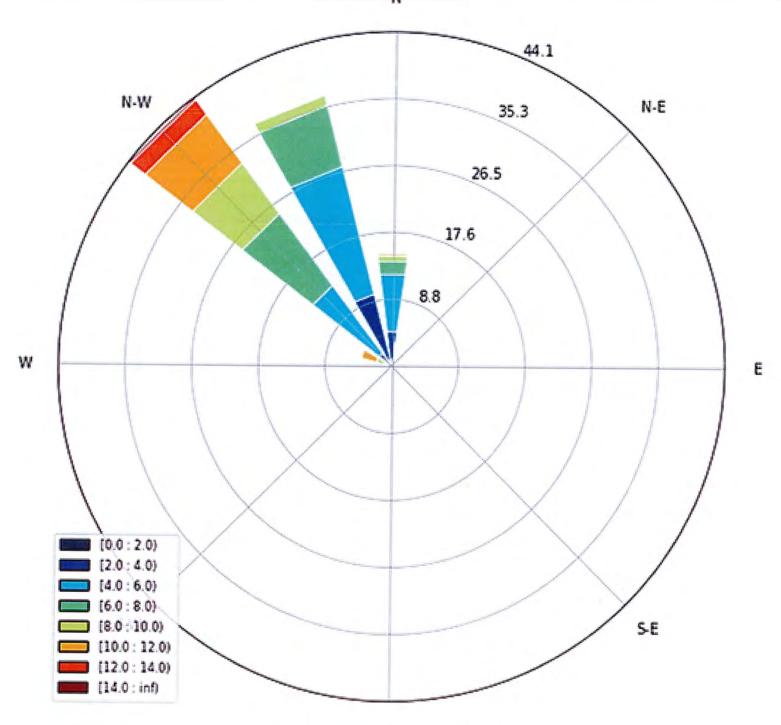
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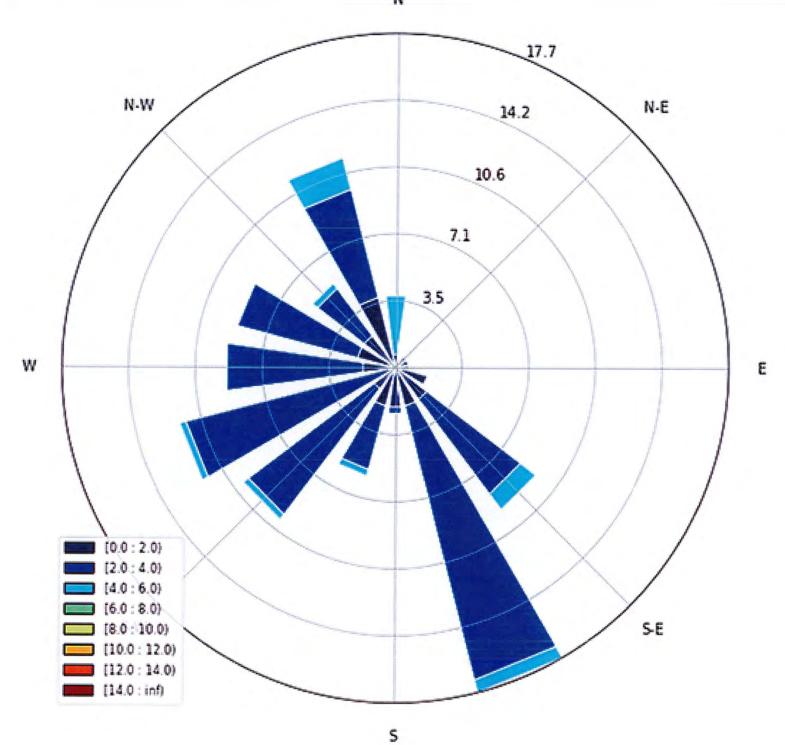
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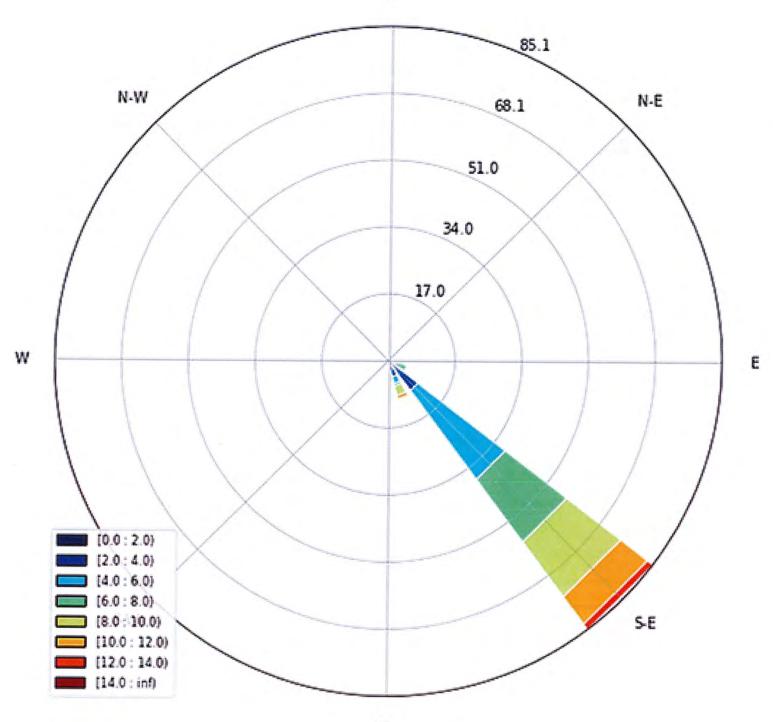
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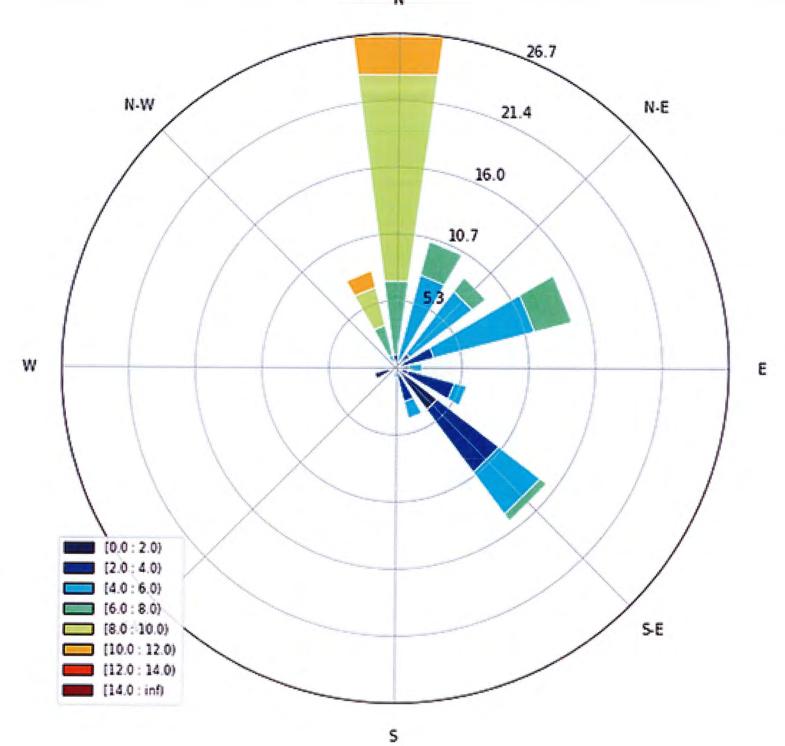
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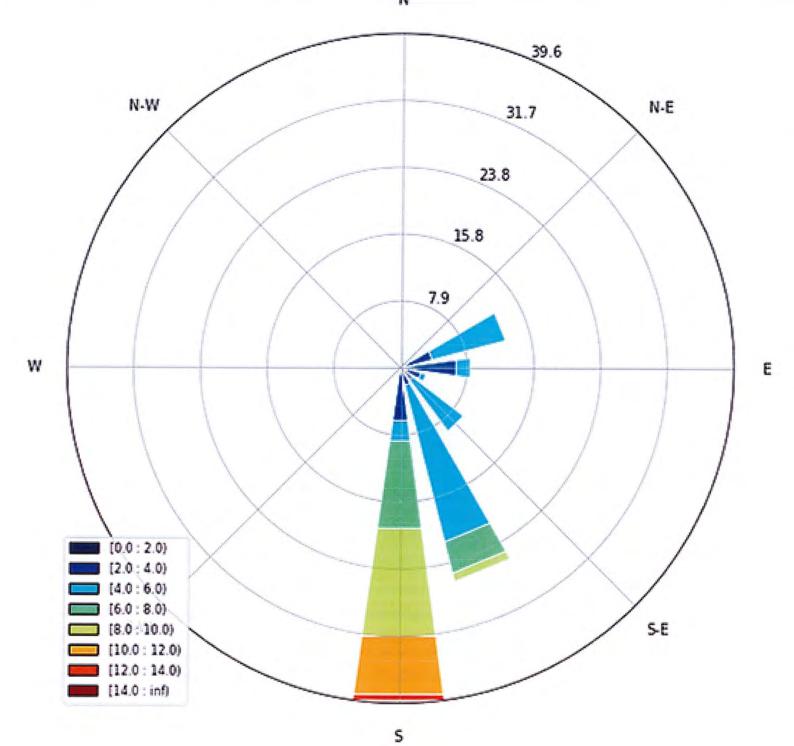
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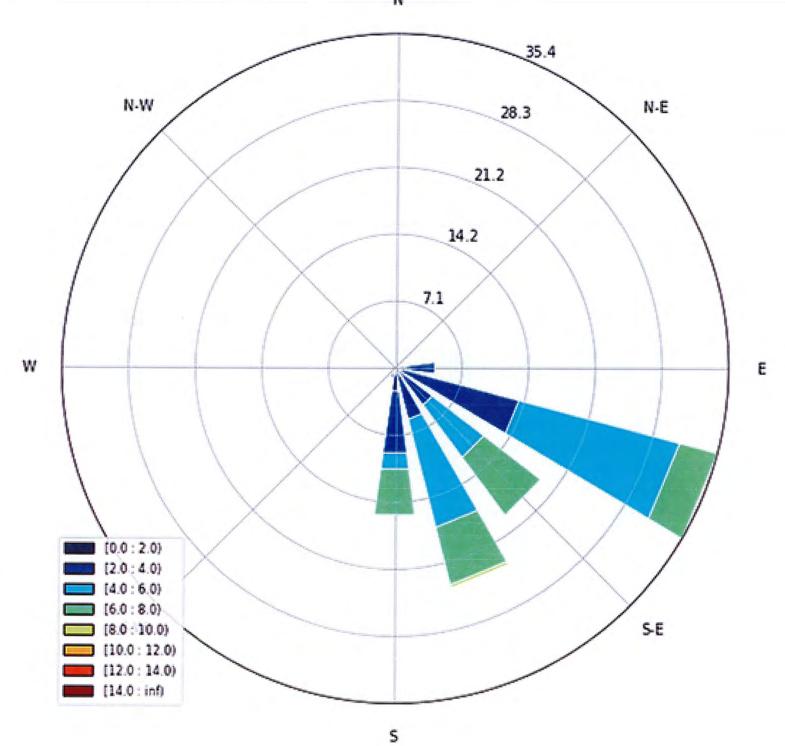
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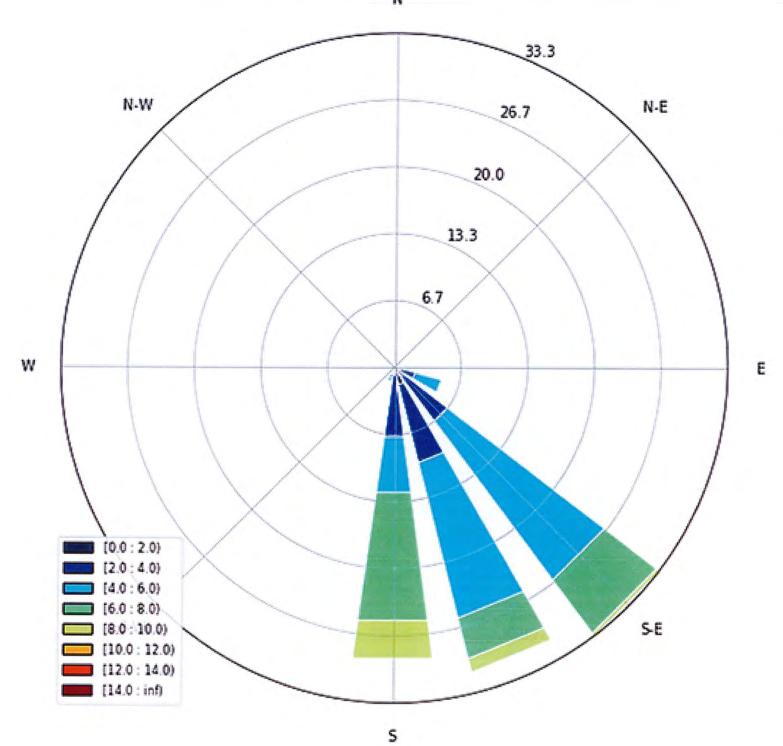
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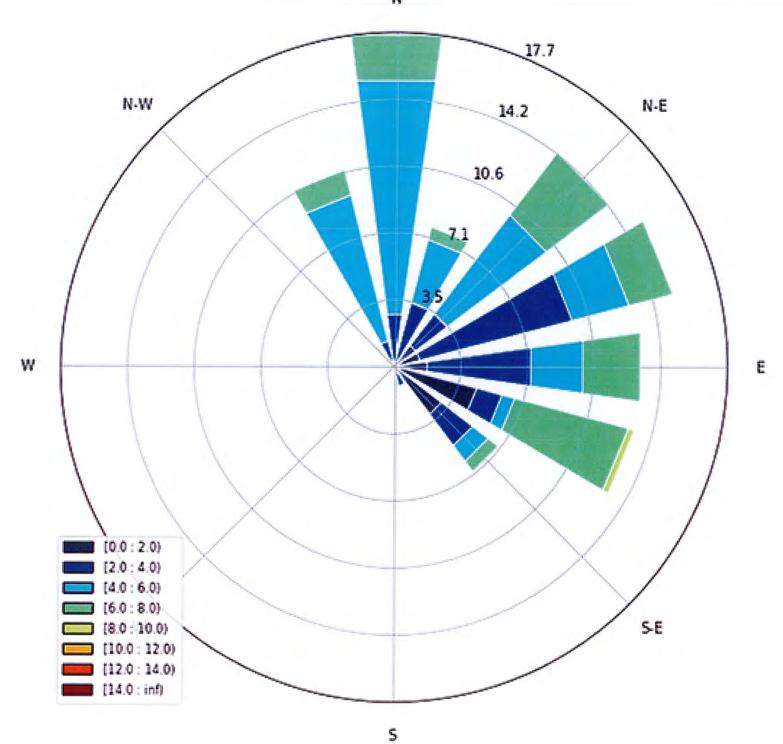
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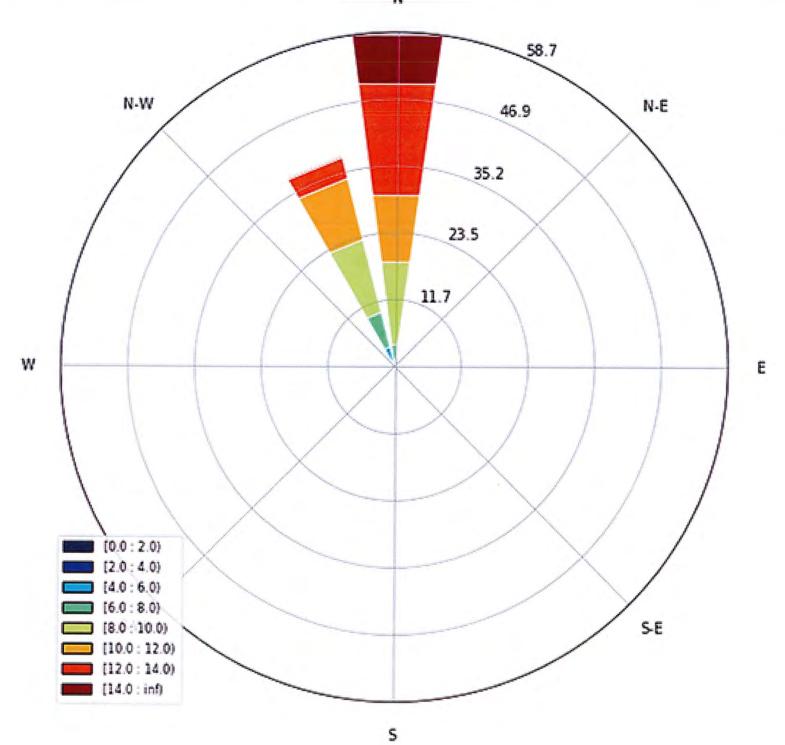
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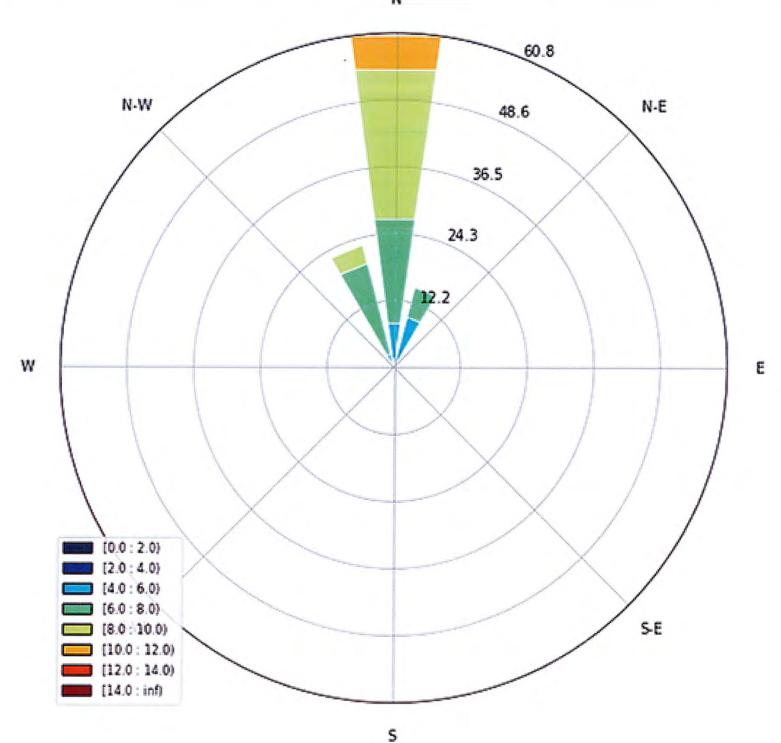
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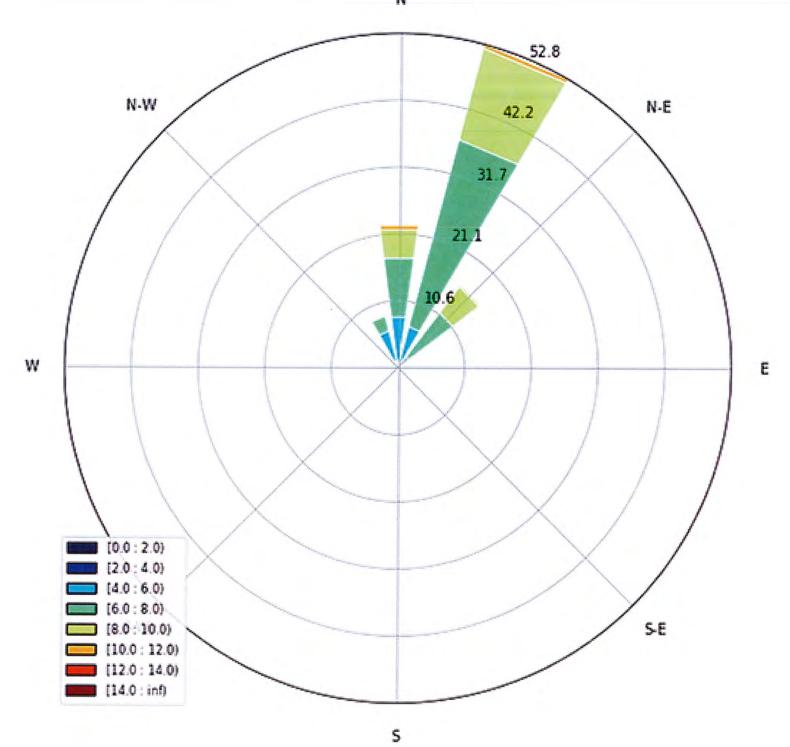
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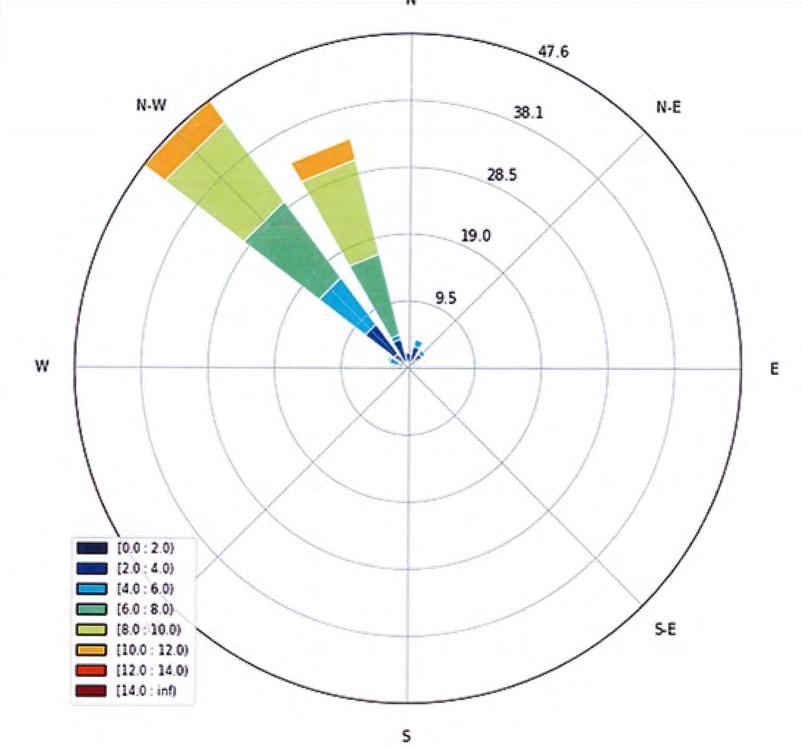
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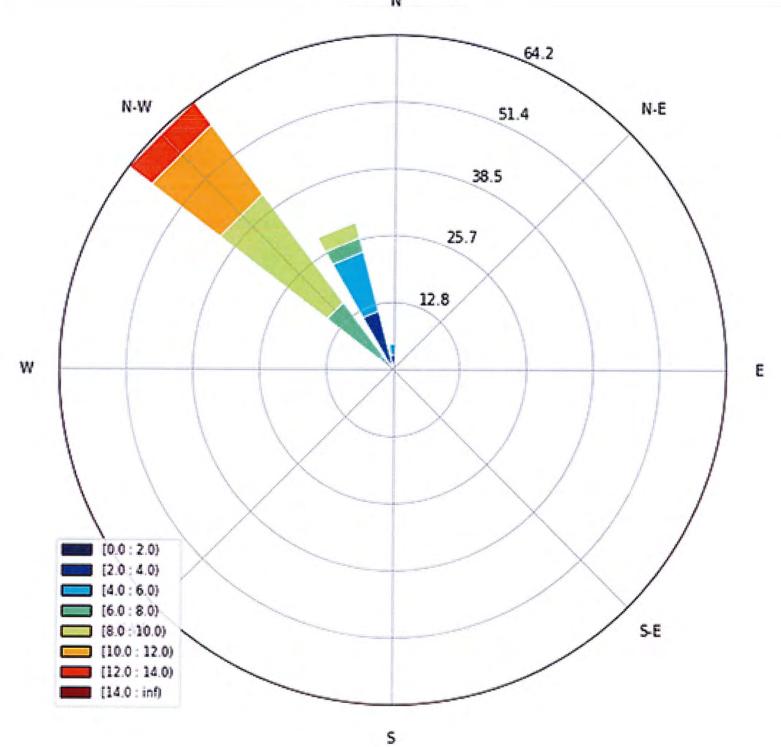
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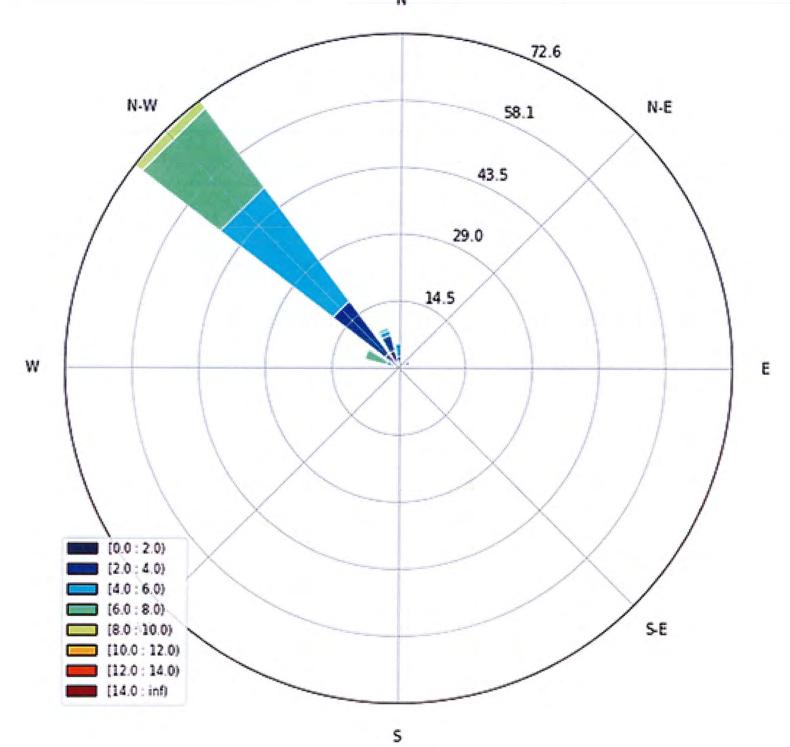
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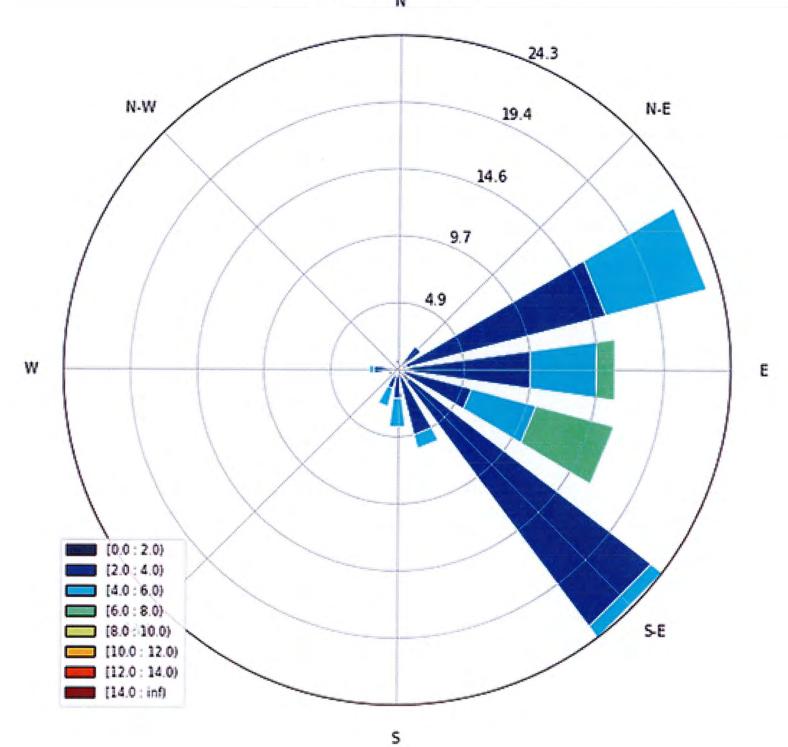
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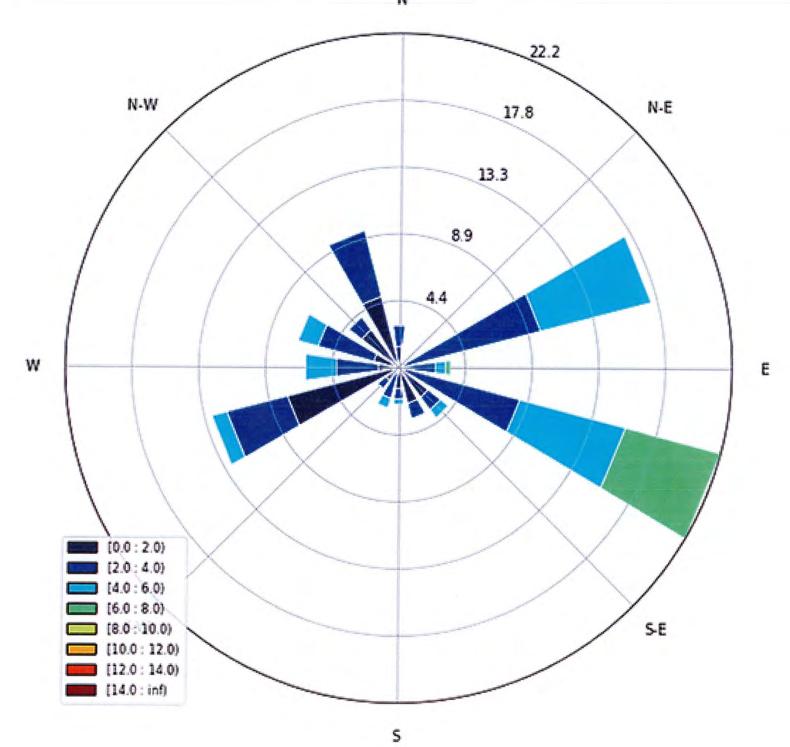
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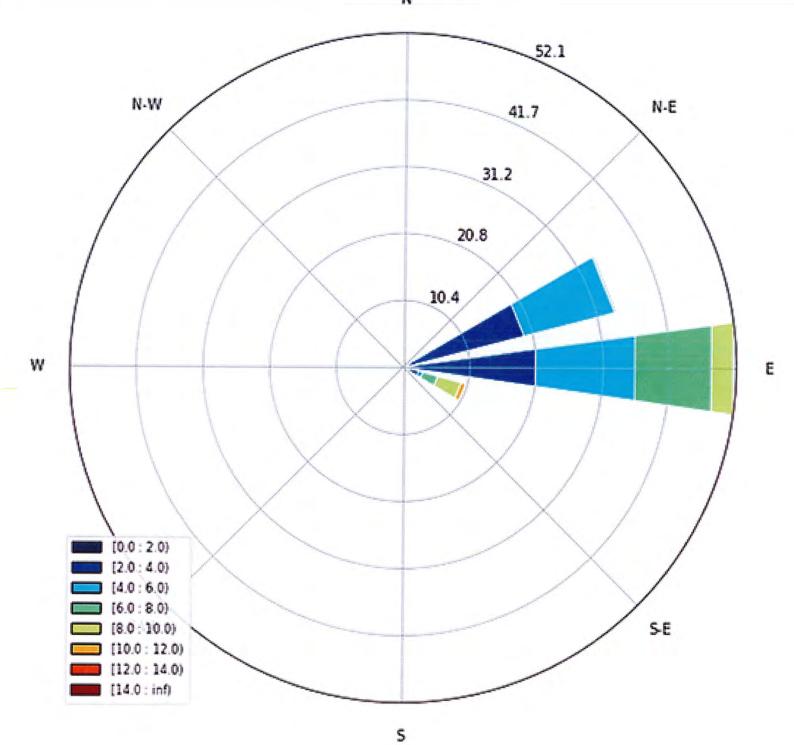
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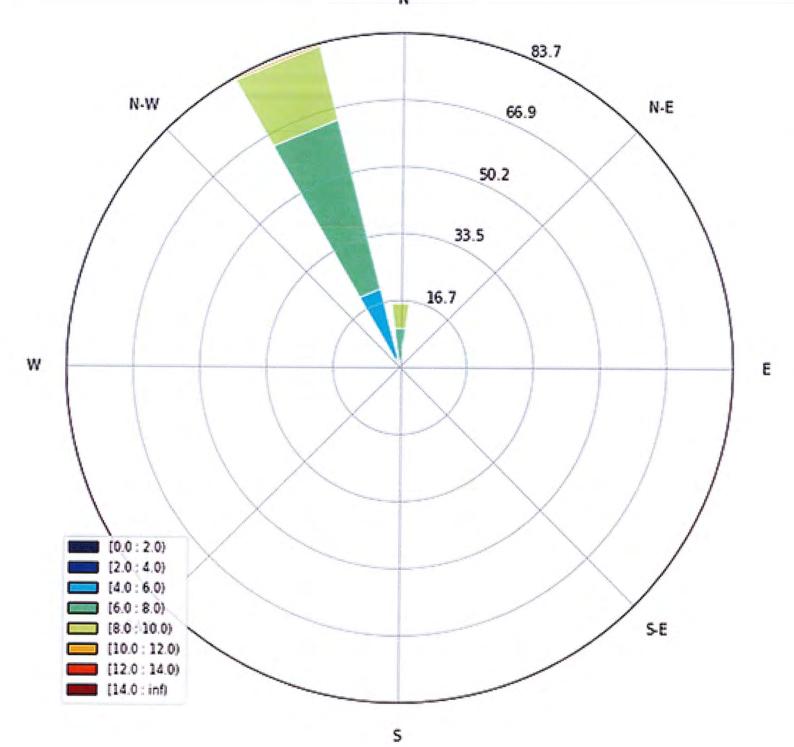
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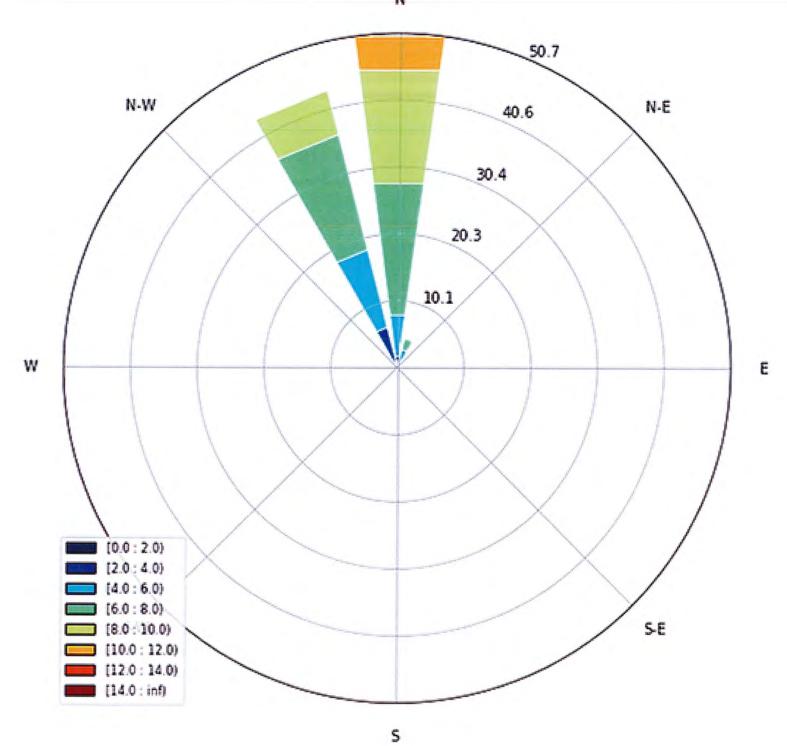
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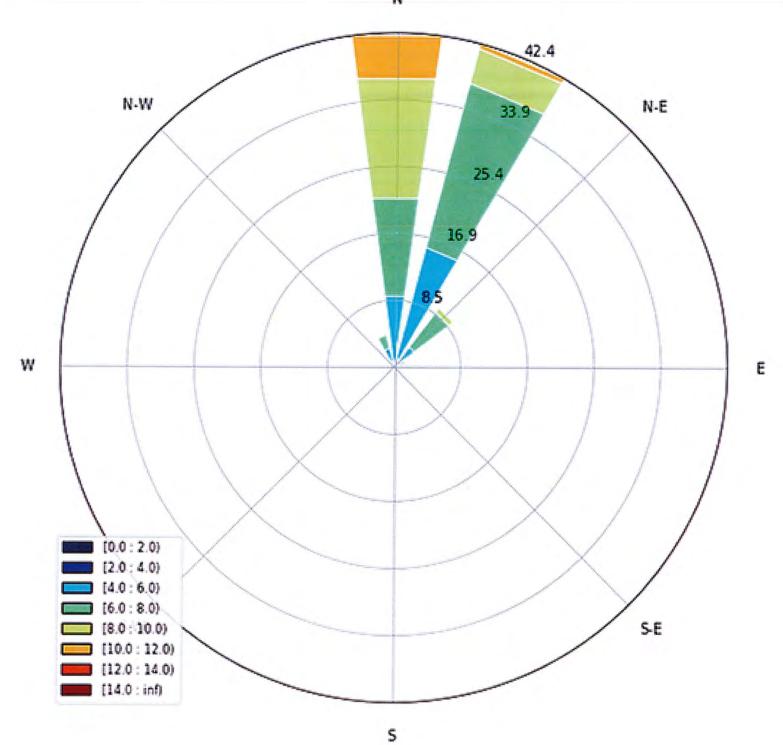
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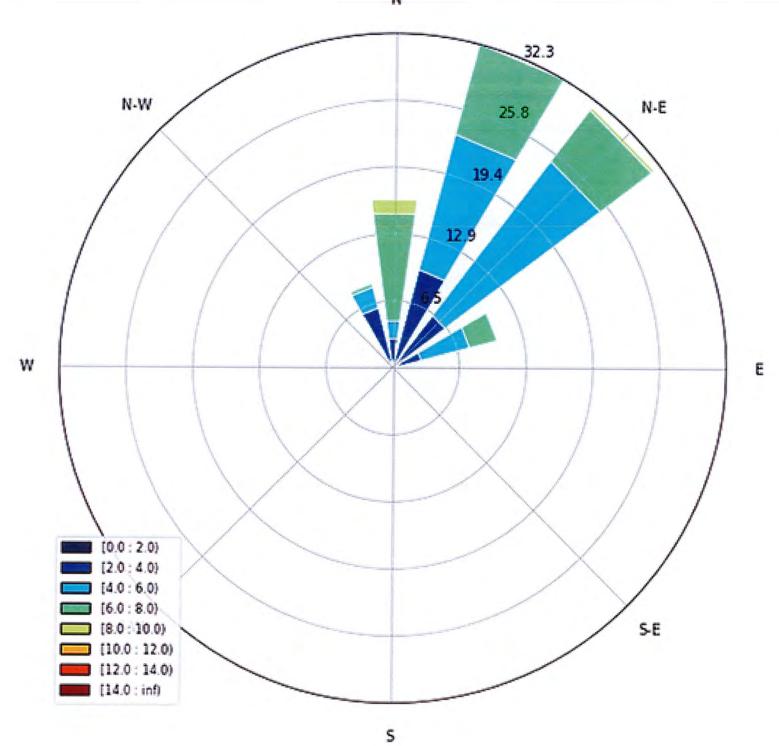
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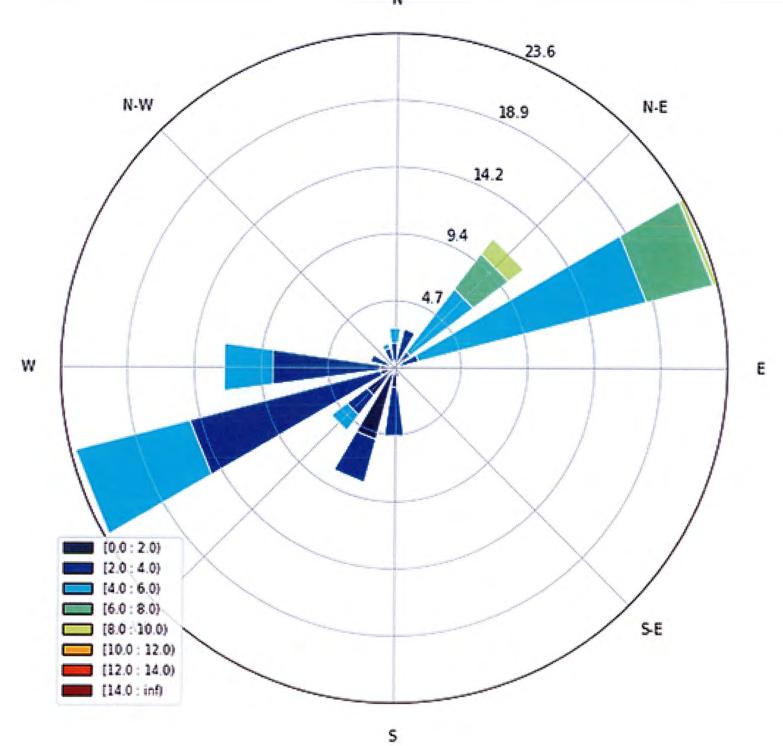
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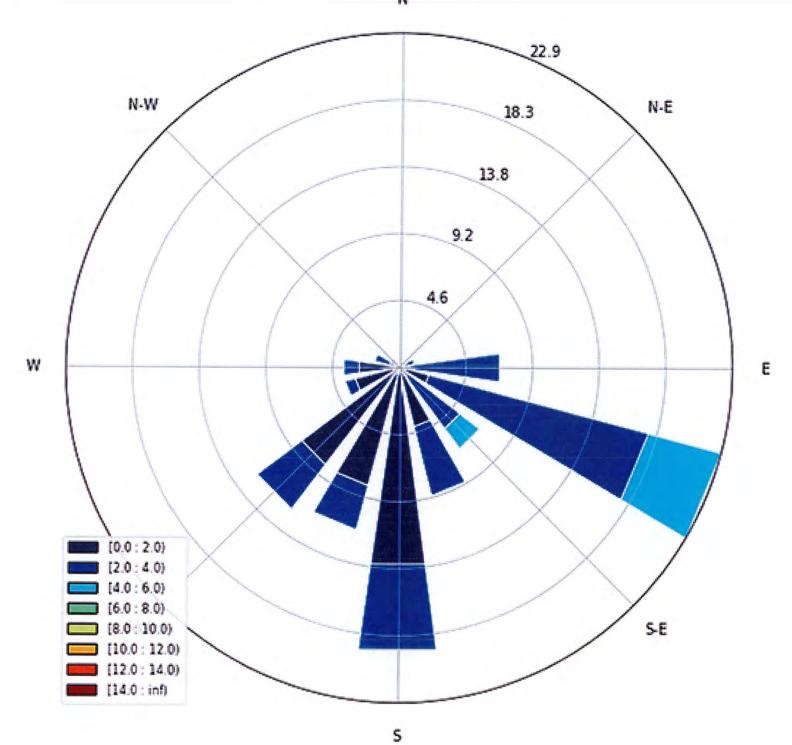
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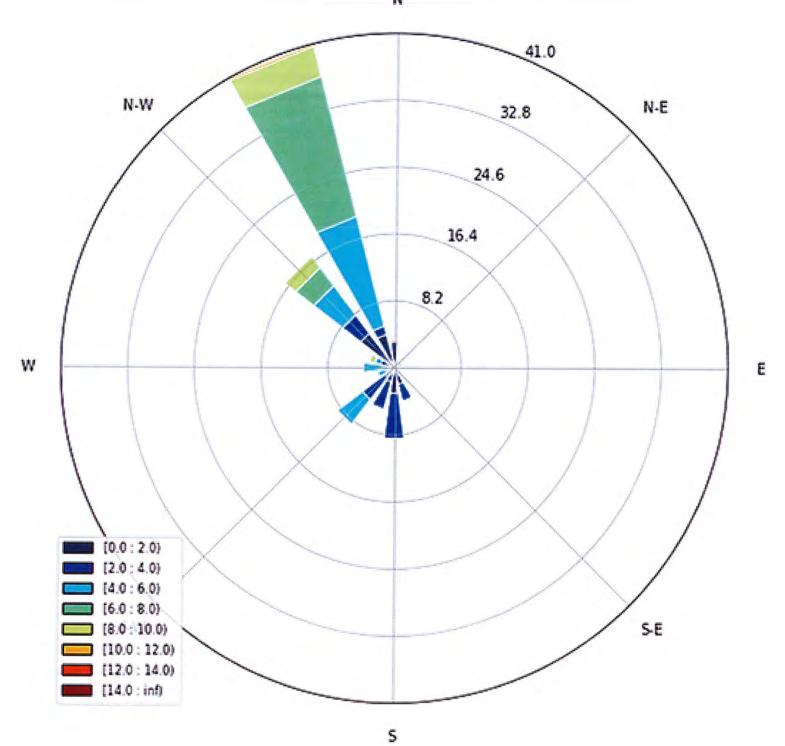
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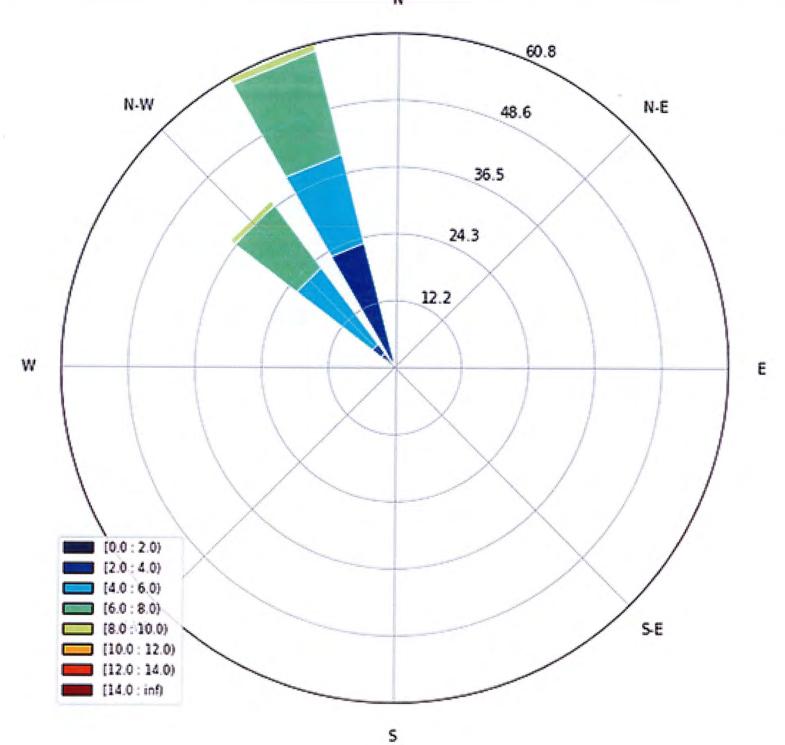
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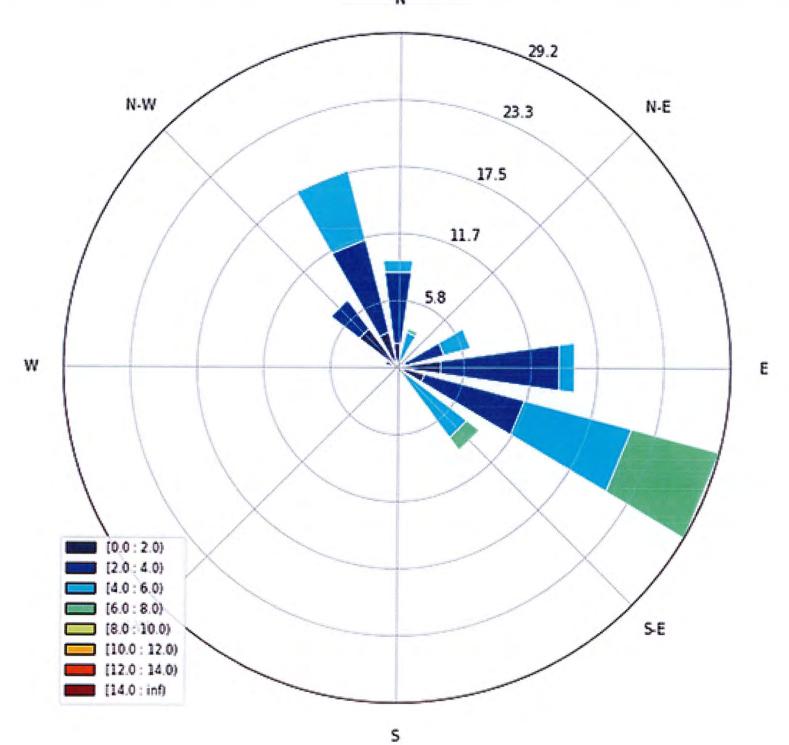
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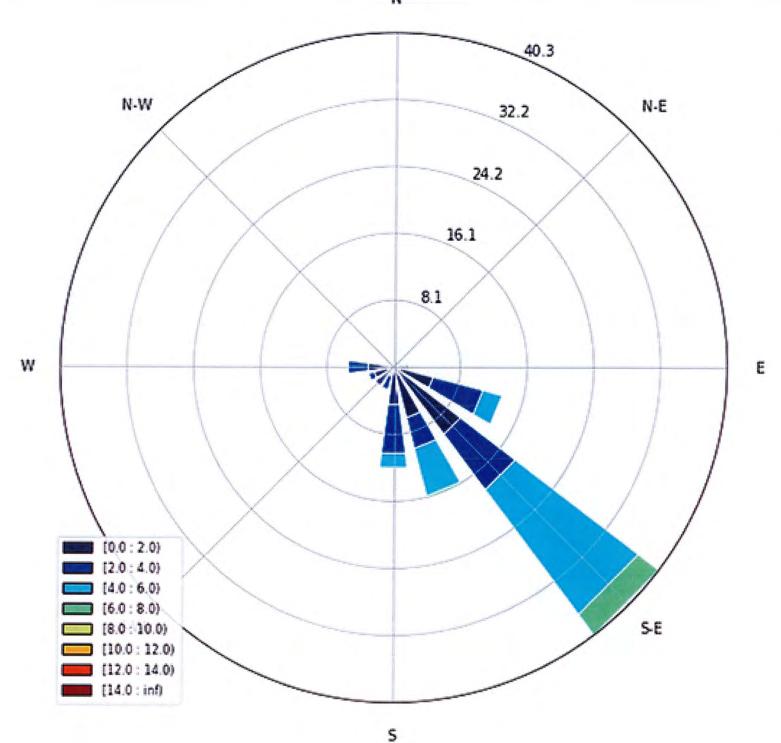
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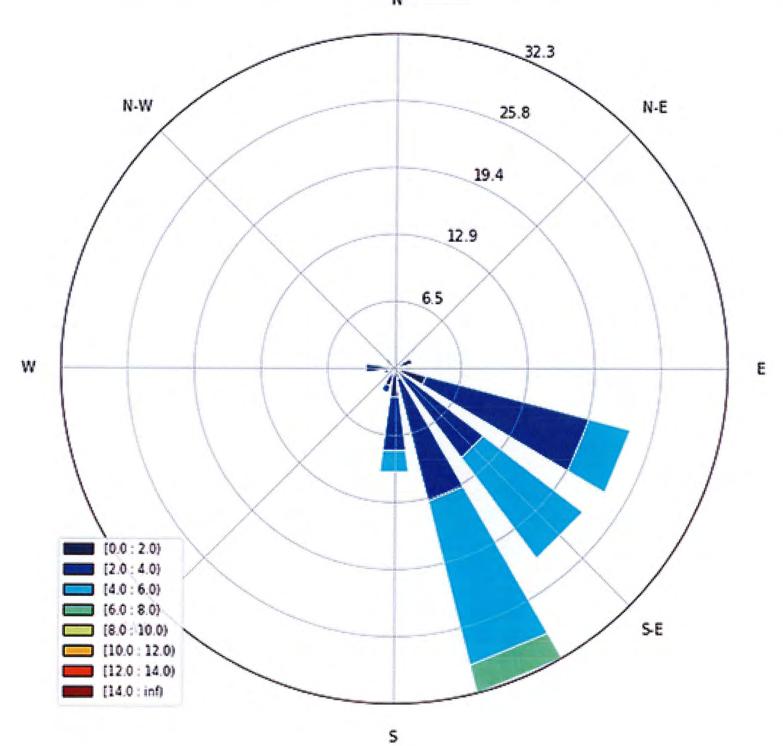
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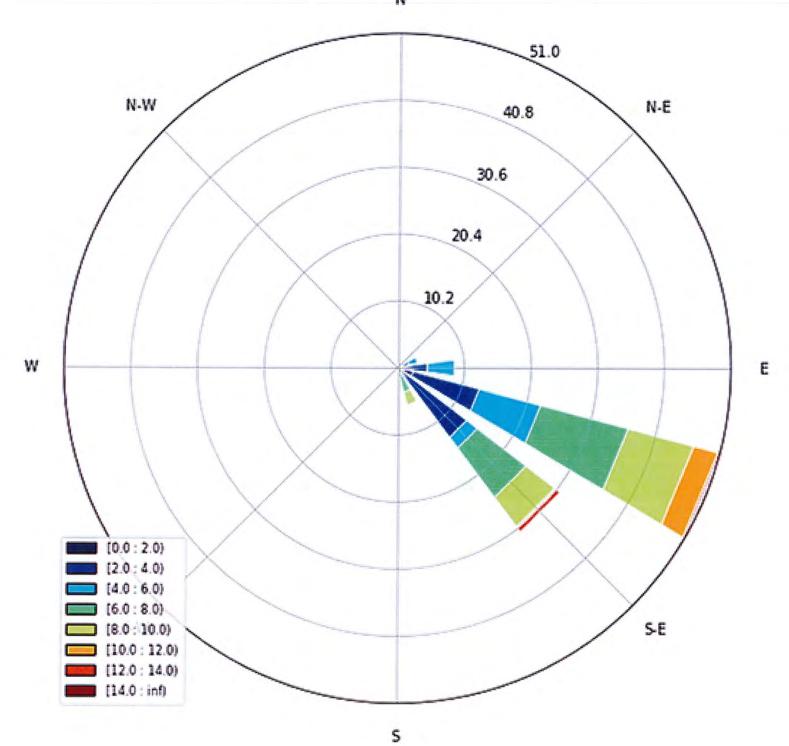
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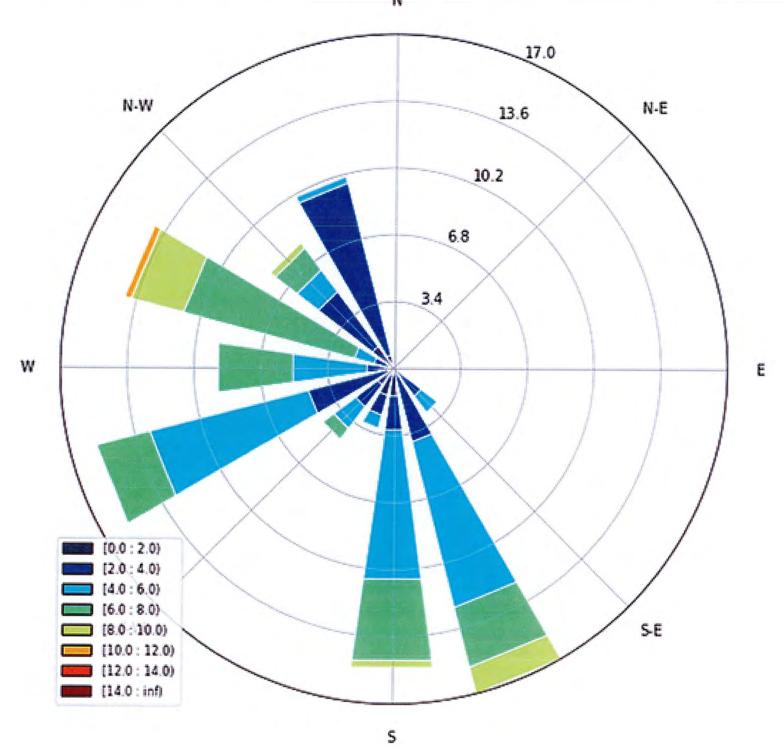
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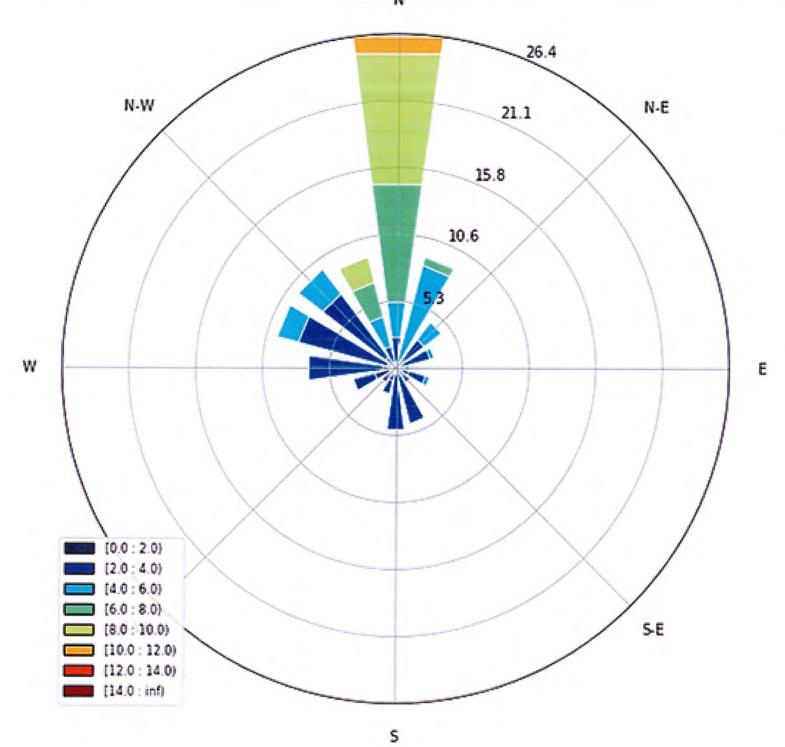
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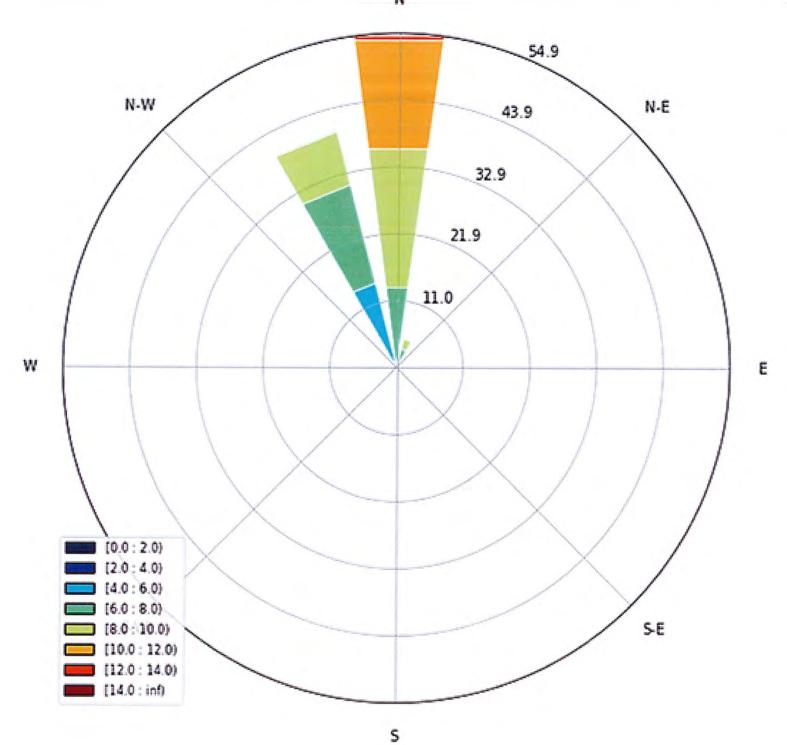
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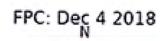


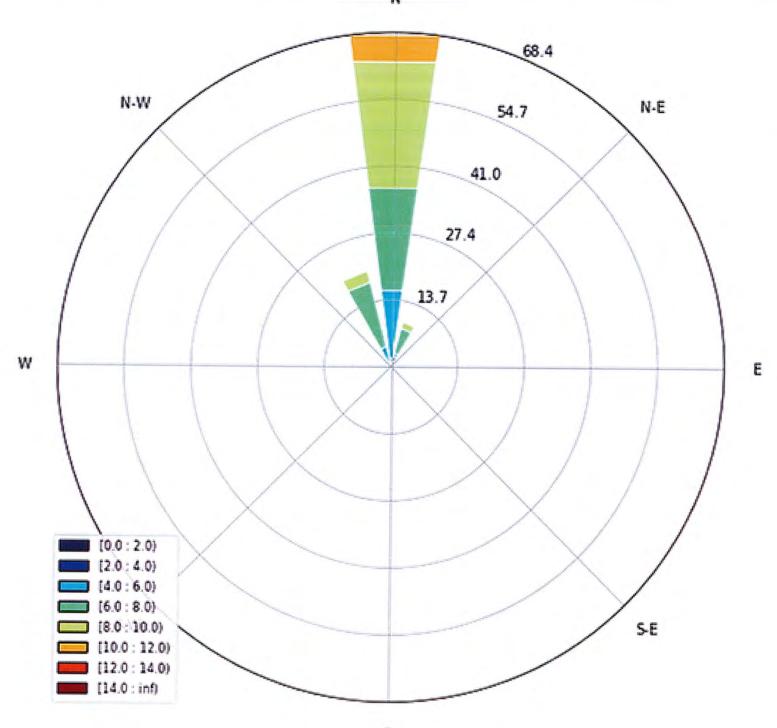
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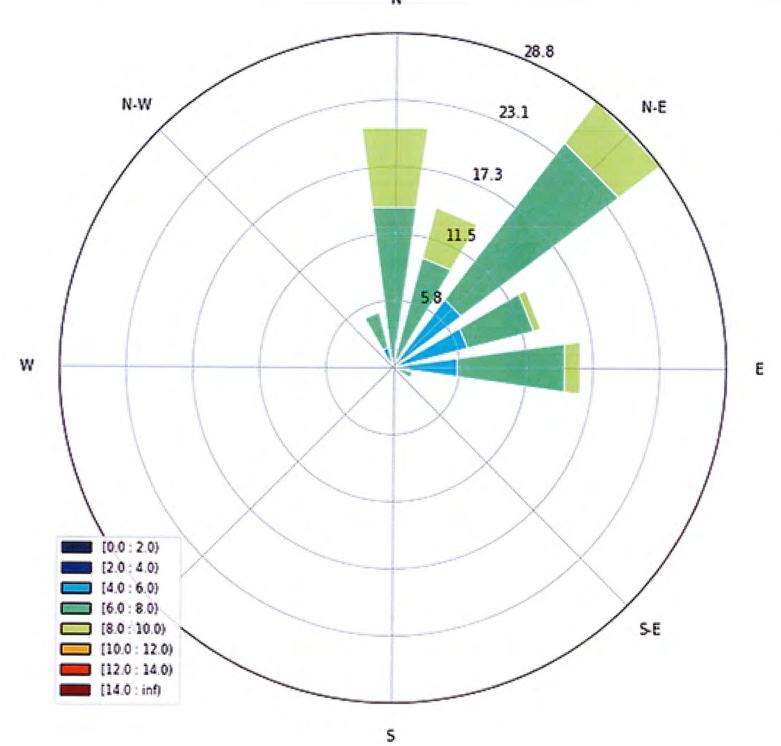
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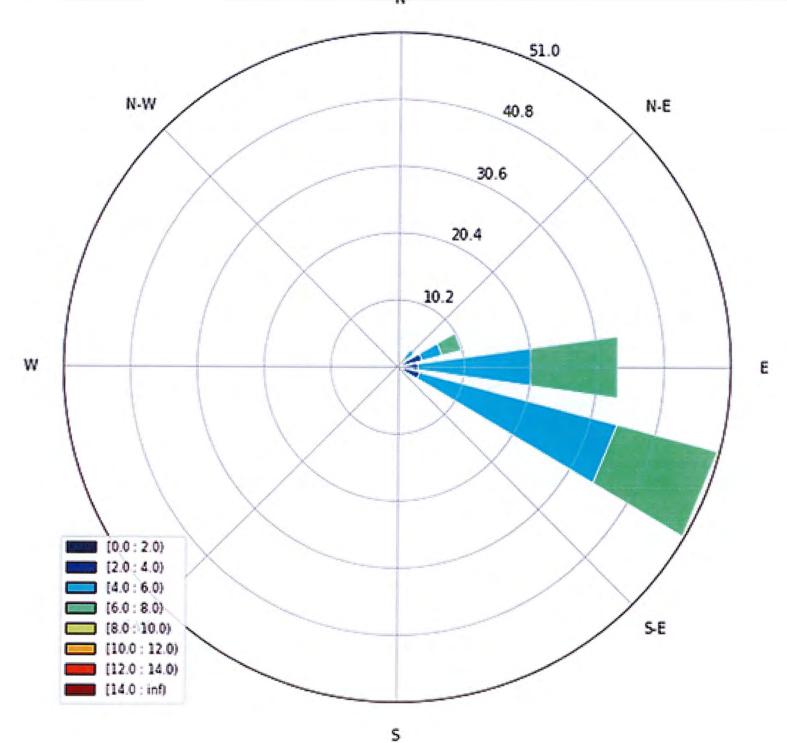




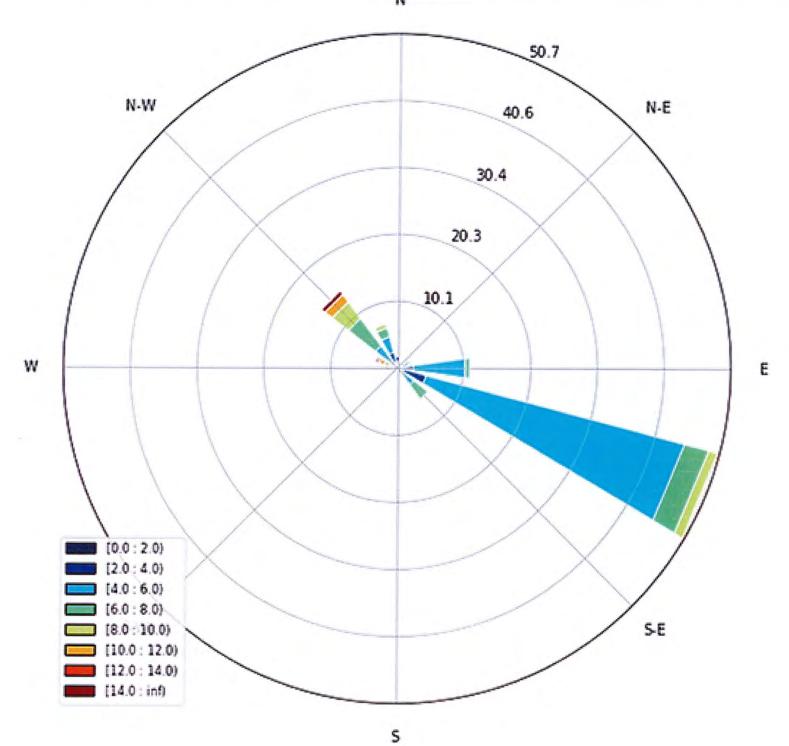
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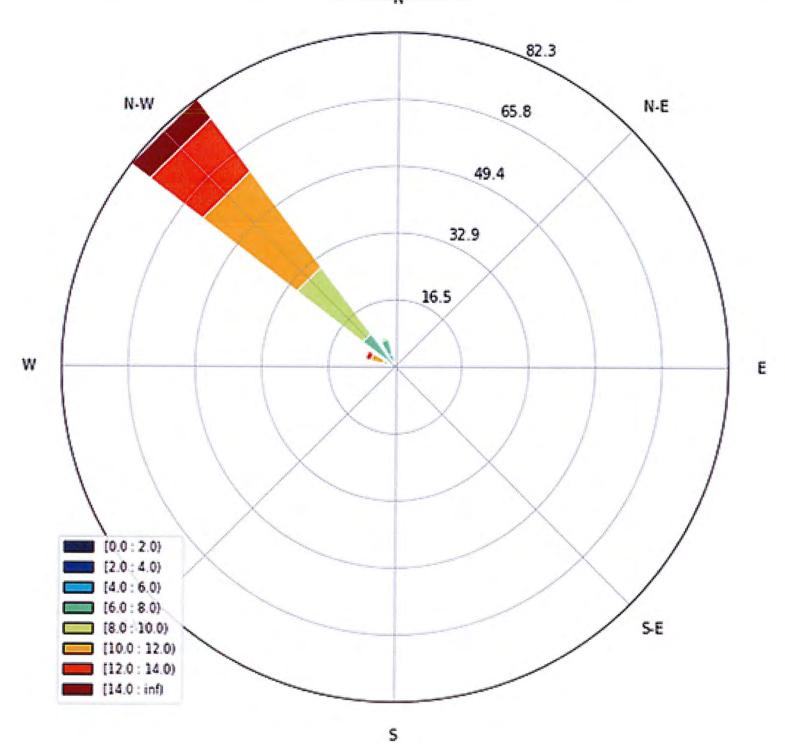
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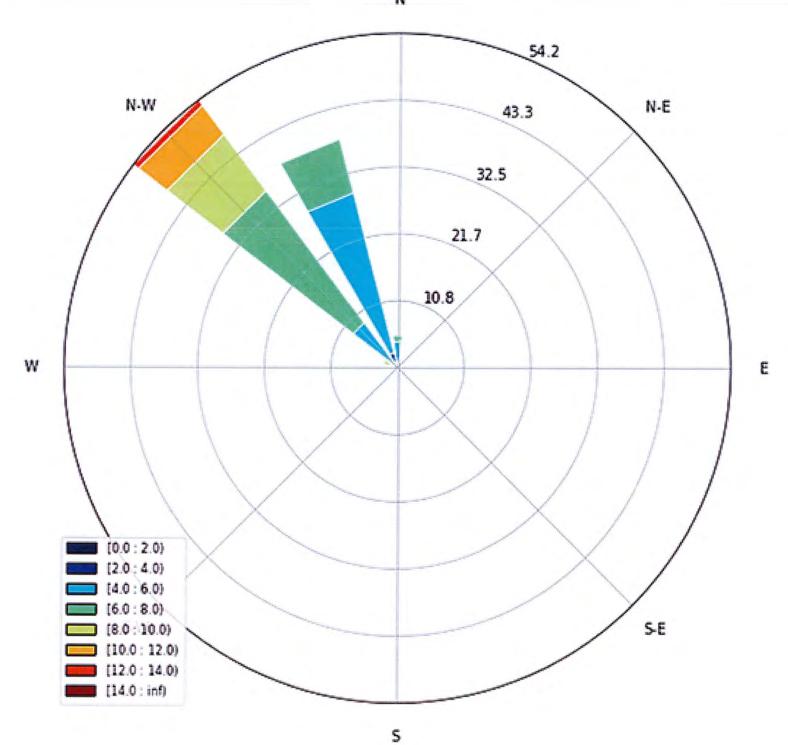
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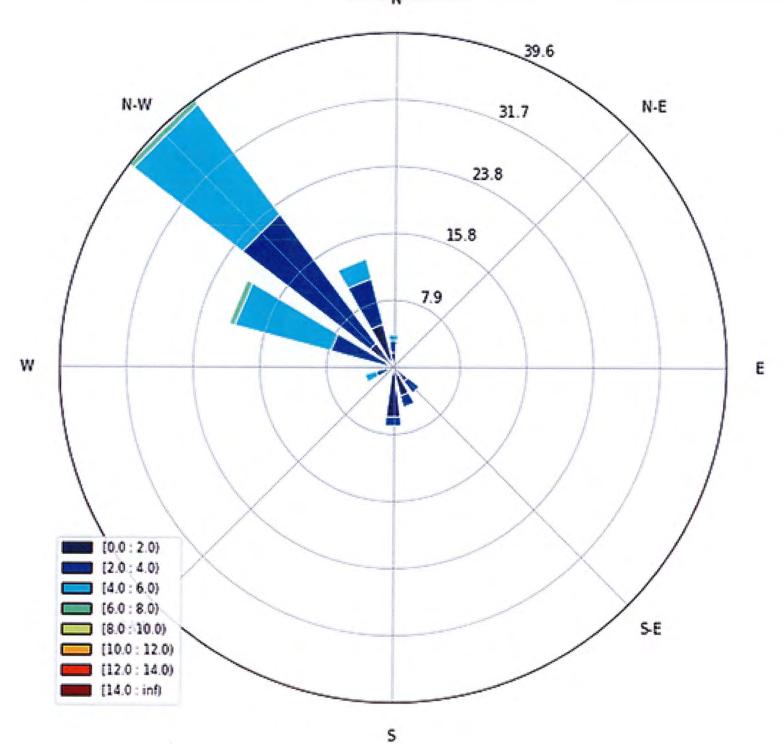
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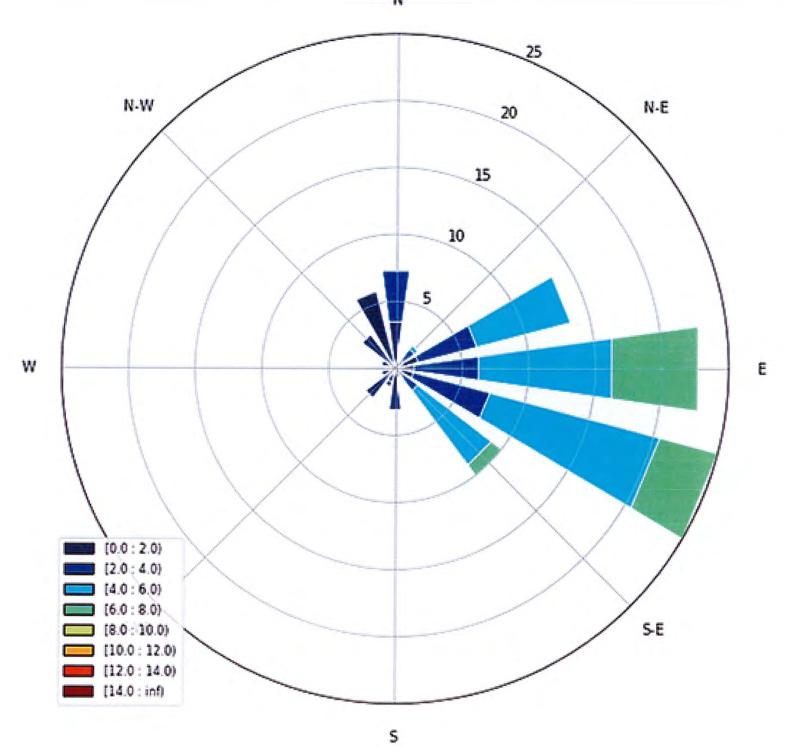
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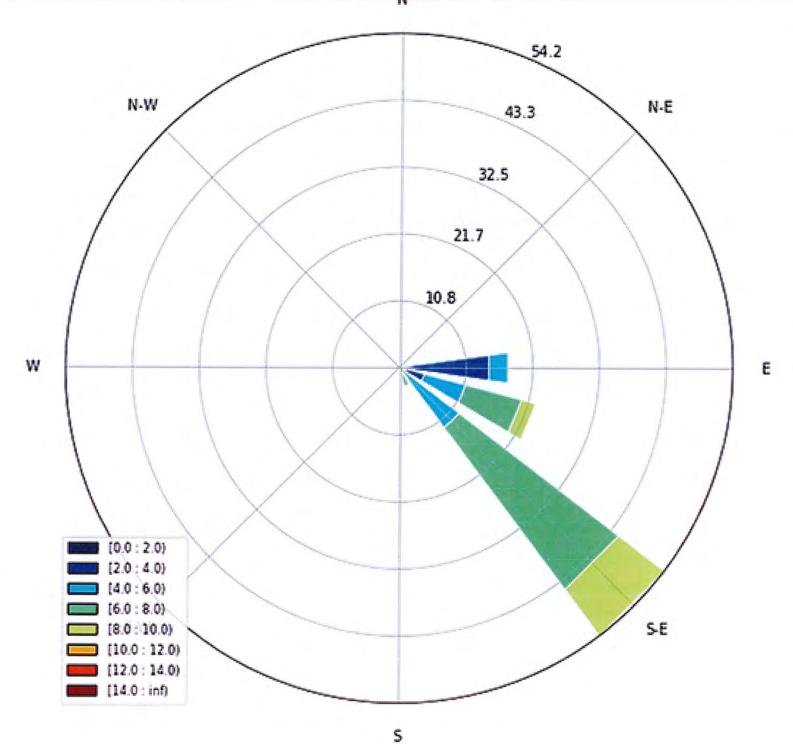
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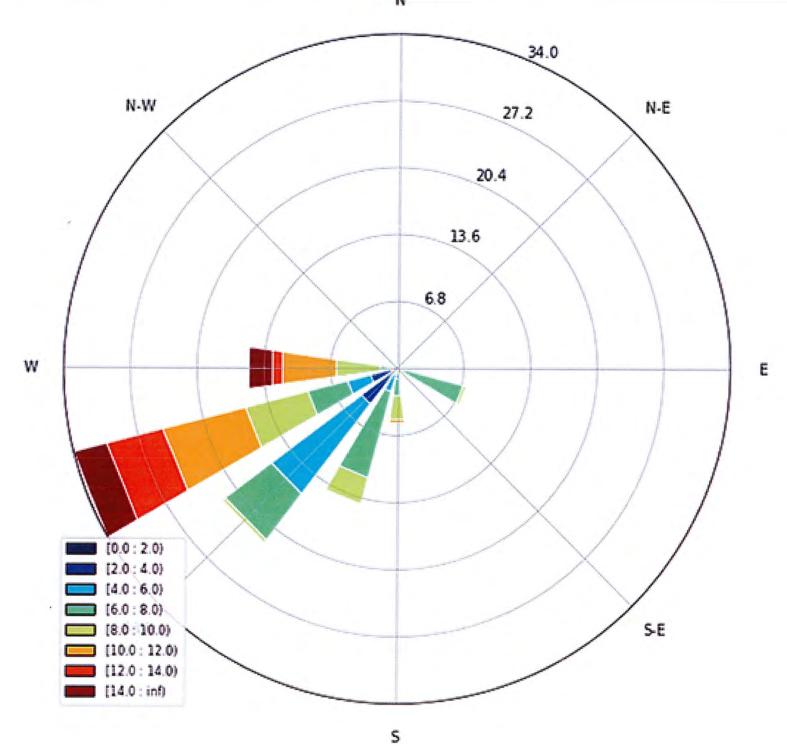
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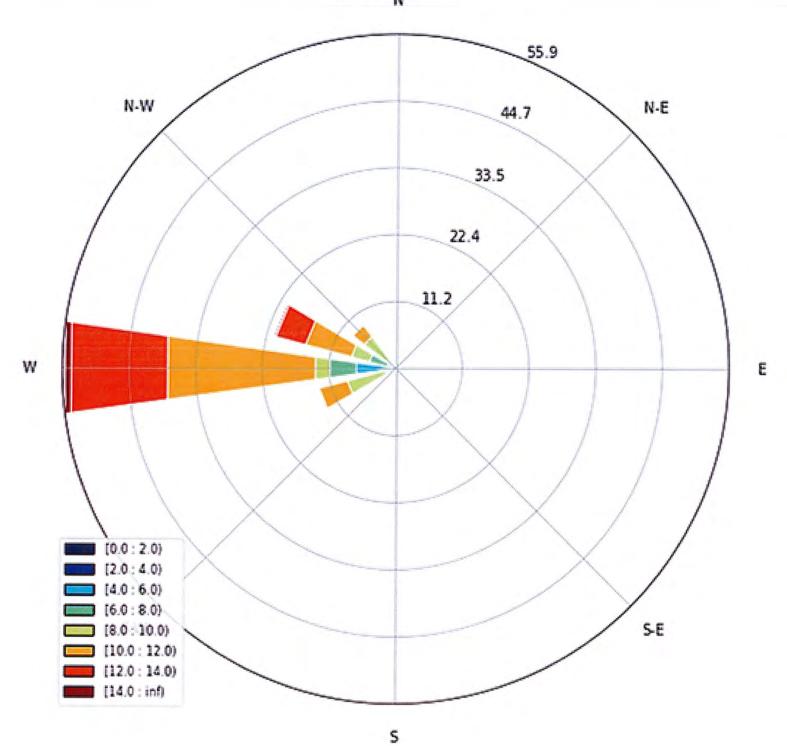
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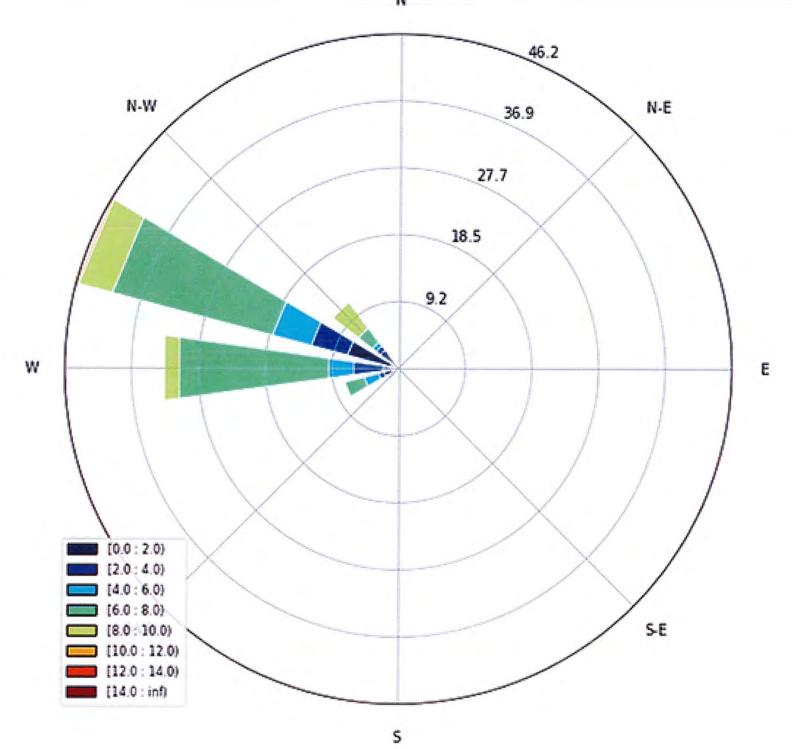
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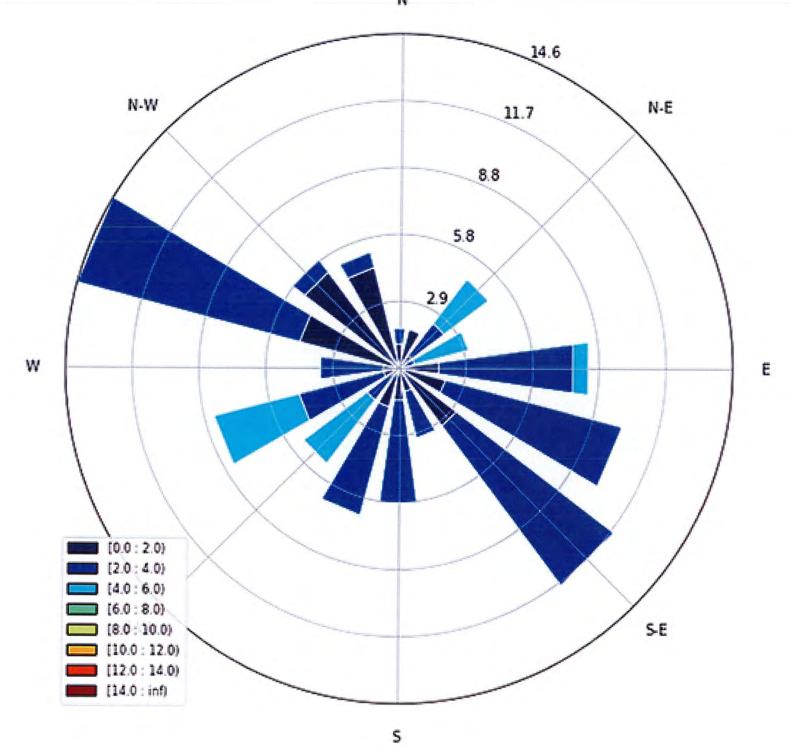
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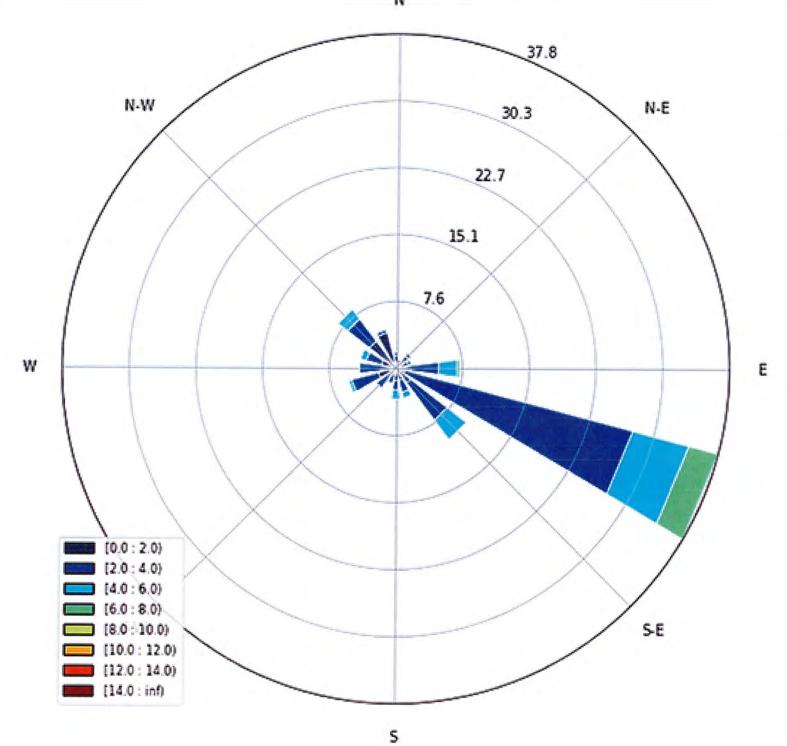
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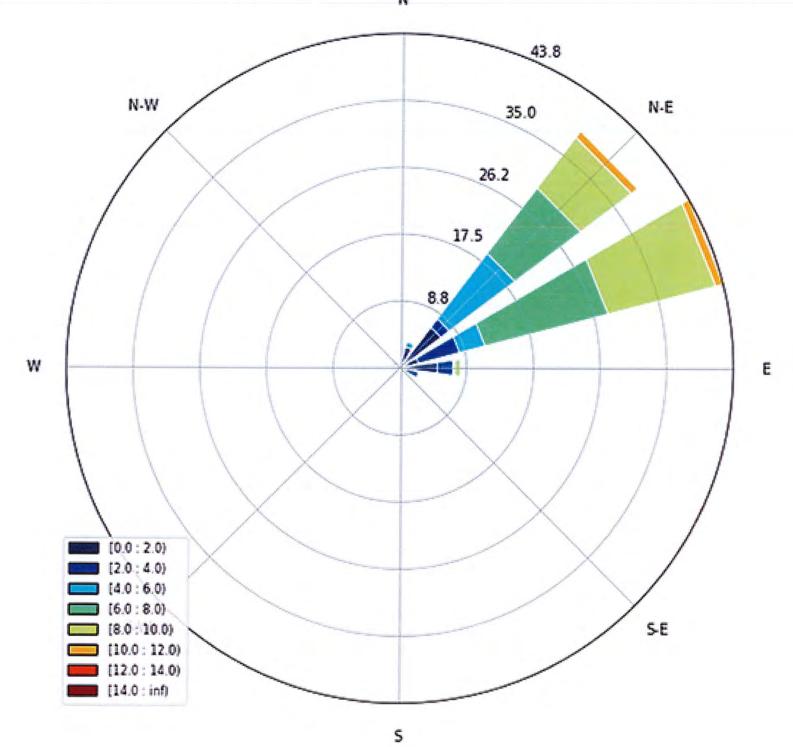
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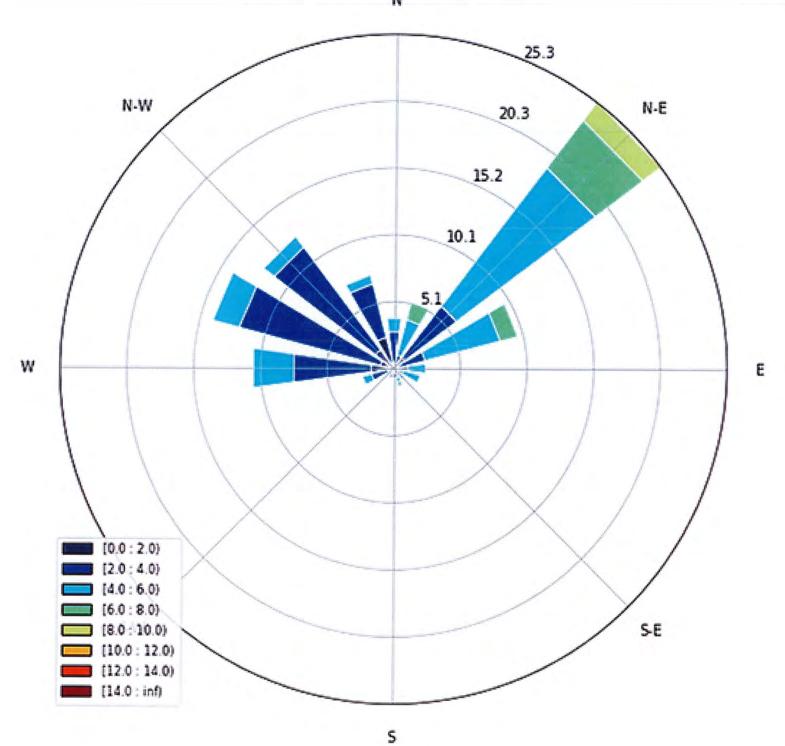
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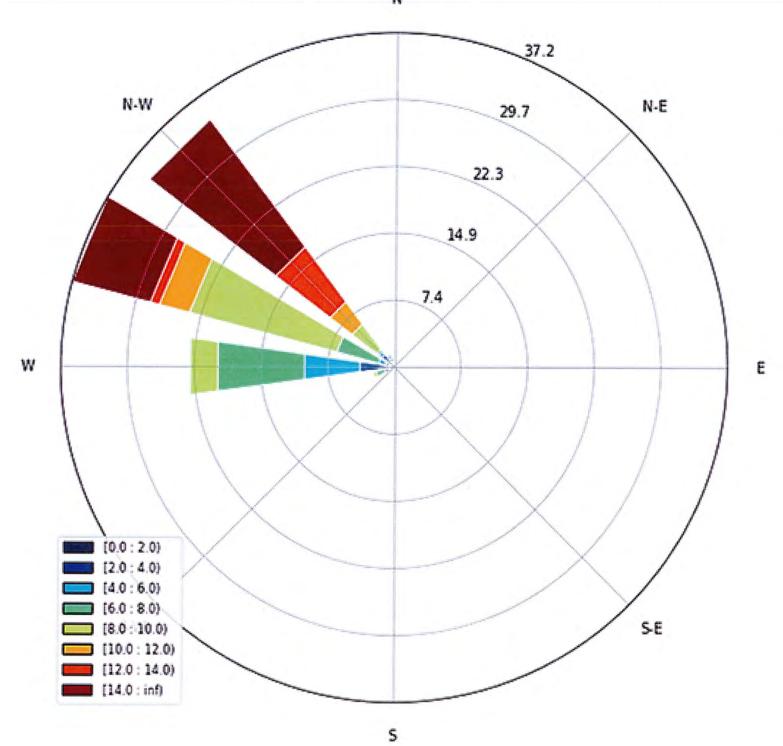
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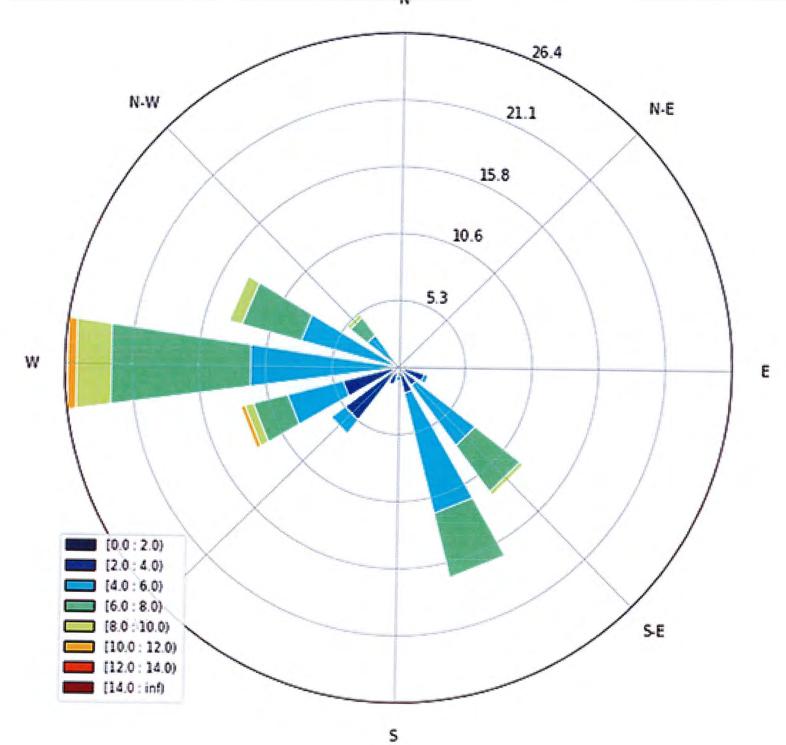
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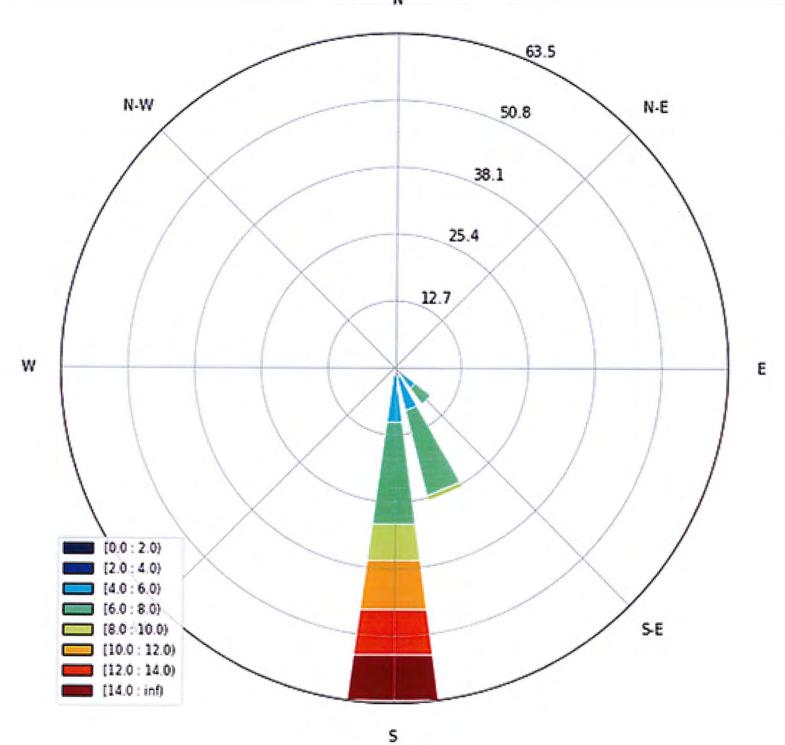
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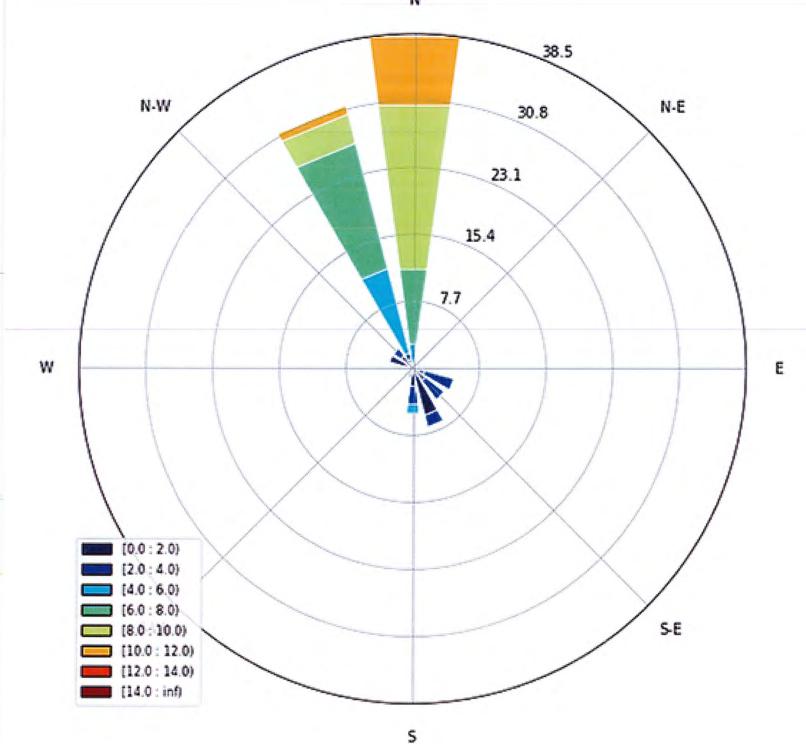
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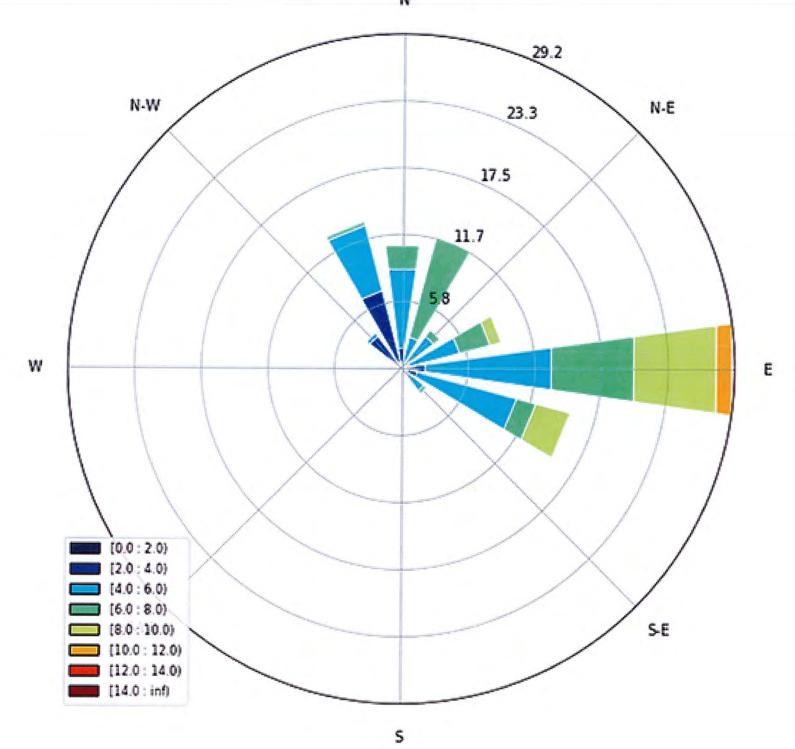
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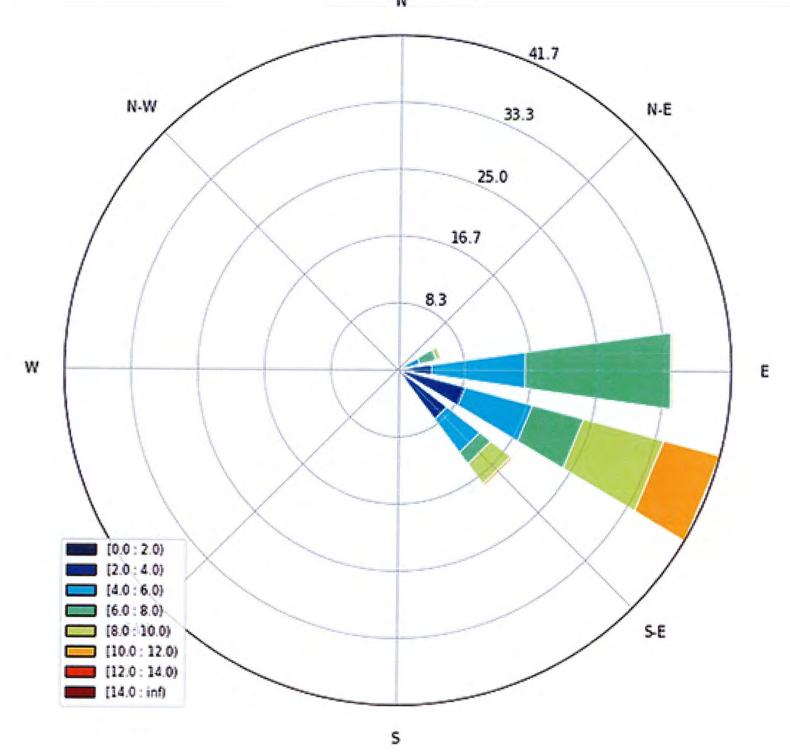
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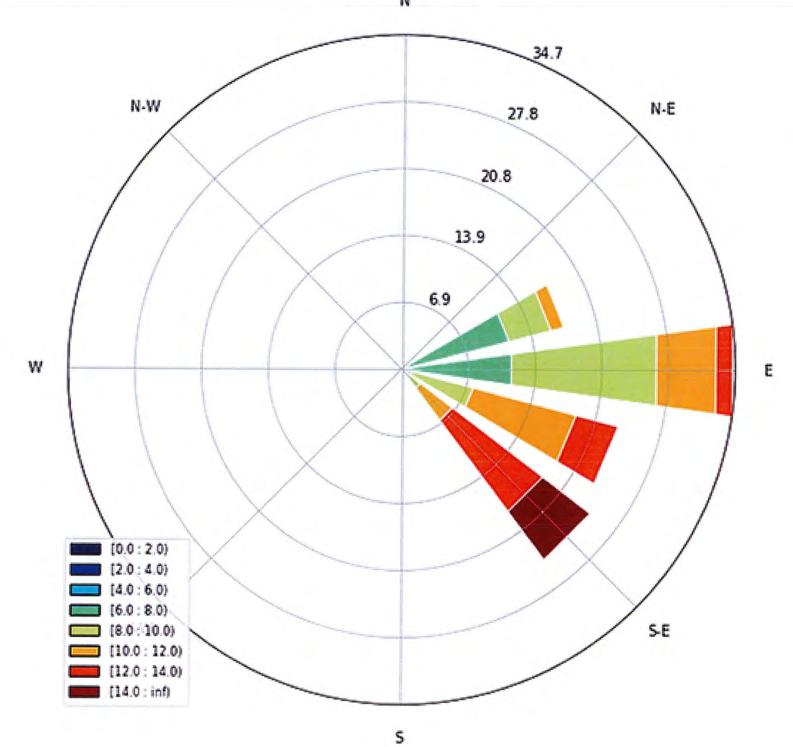
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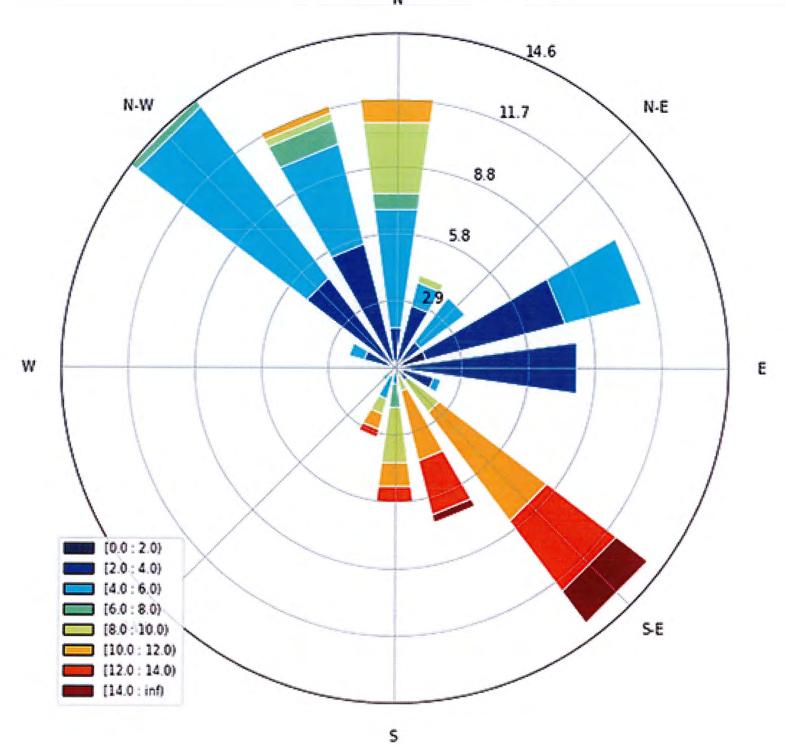
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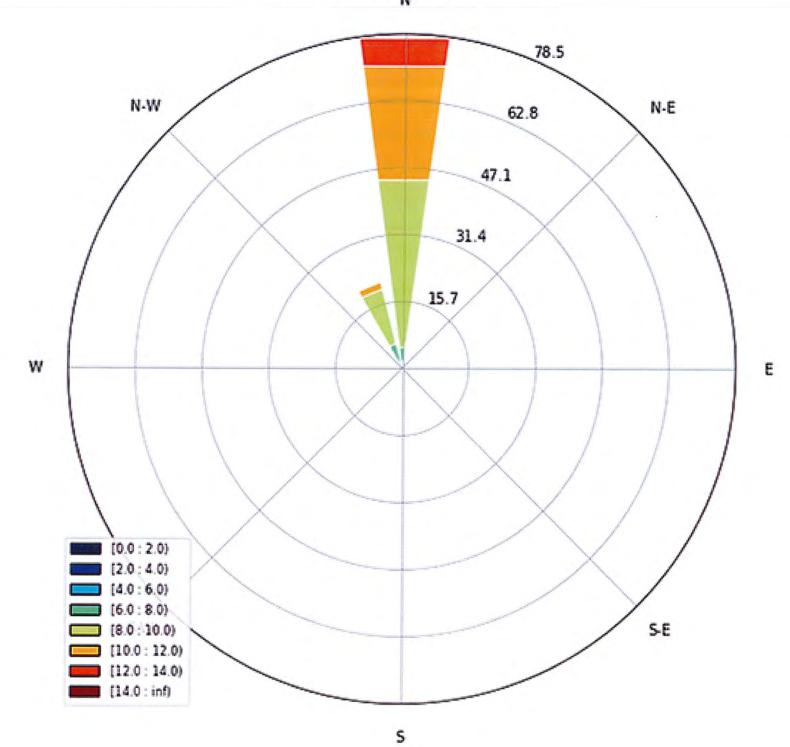
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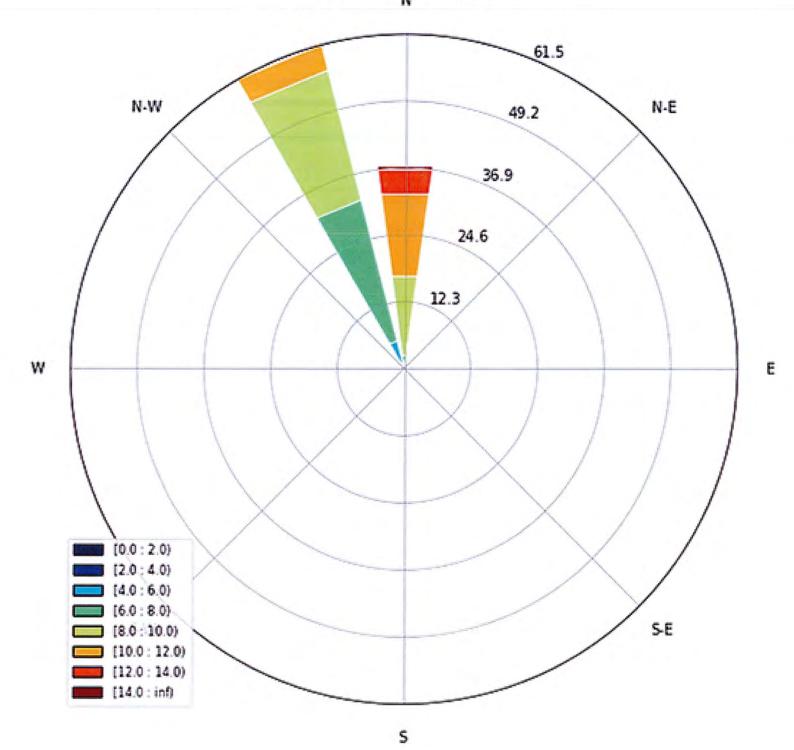
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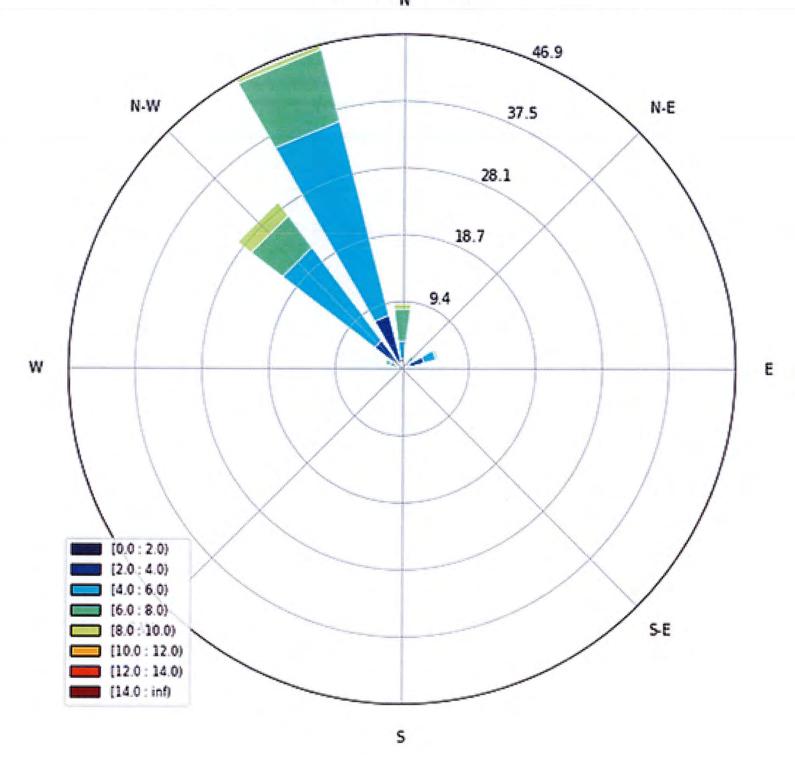
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FPC: Dec 29 2018



FPC: Dec 30 2018



FPC: Dec 31 2018

